



## Technical Memorandum

To: D.J. Arellano, Duke Realty Corporation

From: Eliza Laws, Senior Environmental Analyst  
Noemi Avila, Assistant Environmental Analyst

Date: July 25, 2022

Re: Air Quality/Greenhouse Gas Analysis for Duke Warehouse at Patterson Avenue and Nance Street (DPR No. 21 00005), City of Perris

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The following air quality assessment was prepared to evaluate whether the expected criteria air pollutant emissions generated as a result of construction and operation of the proposed Project would cause exceedances of the South Coast Air Quality Management District's (SCAQMD) thresholds for air quality in the Project area. The greenhouse gas (GHG) assessment was prepared to evaluate whether the expected criteria GHG emissions generated as a result of construction and operation of the proposed Project would exceed the SCAQMD draft screening significance thresholds. This assessment was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000 *et seq.*). The methodology follows the *CEQA Air Quality Handbook* prepared by the SCAQMD for quantification of emissions and evaluation of potential impacts to air resources. As recommended by SCAQMD staff, the **California Emissions Estimator Model**® version 2020.4.0 (CalEEMod) was used to quantify Project-related emissions.

The Project entails development of an approximate 769,668 square foot (SF) high-cube, non-refrigerated warehouse building that includes 10,000 SF of office and 10,000 SF of mezzanine office space, on approximately 35.7 net acres at the northeastern corner of Patterson Avenue and Nance Street, in the City of Perris, California. The Project site is located within the planning area of the Perris Valley Commerce Center Specific Plan (PVCCSP), adopted in 2012. The proposed Project would be constructed as a speculative building. The Project Applicant is proposing several Project design features that, such as achieving LEED "Certified" status and requiring electric onsite service equipment, that enhance sustainability and energy efficiency.

The Project's infrastructure improvements include connection to existing water, sewer, recycled water, and storm drain facilities as well as roadway improvements. The Project's water lines will connect to existing water lines within Patterson Avenue. An extension from an existing sewer line in Harley Knox Boulevard is proposed within Nevada Avenue to the Project site. A recycled water line is proposed in Patterson Avenue between the existing line just north of Markham Street extending north to Nance Street. This recycled water line will serve the proposed Project site, but will be the responsibility of another developer under City Case No. DPR 22-00003. To connect to existing storm drain facilities in Harley Knox Boulevard, storm drain alignments will be constructed in Patterson Avenue and Nevada Street. Construction of an off-site storm drain lateral extension between the Lateral B Stage 4 stub out and an existing Caltrans facility in Patterson Avenue is also required. Roadway improvements are assumed to include site frontage improvements and additional paving in Nance Street and Nevada Avenue, as further detailed herein. The total off-site disturbance is approximately 3.53 acres.

## ▪ Regional Significance Thresholds

The thresholds contained in the *SCAQMD CEQA Air Quality Handbook*<sup>1</sup> (SCAQMD 1993) and posted in a supplemental table as mass daily thresholds on SCAQMD's website<sup>2</sup> are considered regional thresholds and are shown in **Table 1 – SCAQMD CEQA Daily Regional Significance Thresholds**, below. These regional thresholds were developed based on the SCAQMD's treatment of a major stationary source.

**Table 1 – SCAQMD CEQA Daily Regional Significance Thresholds**

Emission Threshold	Units	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM-10	PM-2.5
Construction	lbs/day	75	100	550	150	150	55
Operation	lbs/day	55	55	550	150	150	55

Air quality impacts can be described in a short- and long-term perspective. Short-term impacts occur during site grading and Project construction and consist of fugitive dust and other particulate matter, as well as exhaust emissions generated by construction-related vehicles. Long-term air quality impacts occur once the Project is in operation.

The Project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures. Compliance with this rule is achieved through application of standard best management practices in construction and operation activities, such as application of water or chemical stabilizers to disturbed soils, managing haul road dust by application of water, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 mph, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph and establishing a permanent, stabilizing ground cover on finished sites. In addition, projects that disturb 50 or more acres or more of soil or move 5,000 cubic yards of materials per day are required to submit a Fugitive Dust Control Plan or a Large Operation Notification Form to SCAQMD. Based on the size of this Project's disturbance area (39.23 acres), a Fugitive Dust Control Plan or a Large Operation Notification Form would not be required.

### Short-Term Analysis

Short-term emissions from Project construction were evaluated using the CalEEMod version 2020.4.0 program. The estimated construction period for the proposed Project is approximately 11 months, beginning no sooner than September 2022. The default parameters within CalEEMod were used and these default values reflect a worst-case scenario, which means that Project emissions are expected to be equal to or less than the estimated emissions. In addition to the default values used, assumptions relevant to model inputs for short-term construction emission estimates used are:

- Construction is anticipated to begin in September 2022 with grading and end with architectural coatings (painting):

<sup>1</sup> South Coast Air Quality Management District, *CEQA Air Quality Handbook*, November 1993. (Available at SCAQMD.)

<sup>2</sup> <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2>

Construction Activity	Start Date	End Date	Total Working Days
Grading	September 1, 2022	October 31, 2022	43 Days
Building Construction	November 1, 2022	July 31, 2023	195 Days
Paving	July 1, 2023	July 31, 2023	21 Days
Architectural Coatings	June 1, 2023	July 31, 2023	43 Days

- The equipment to be used for each activity is shown below and is based on CalEEMod defaults and the Applicant. Each piece of equipment is assumed to operate 8 hours per day:

Construction Activity	Off-Road Equipment	Unit Amount
Grading	Excavators	2
	Graders	1
	Rubber Tired Dozers	1
	Tractors/Loaders/Backhoes	2
	Scrapers	8
Building Construction	Crane	1
	Forklifts	3
	Generator Set	1
	Tractor/Loader/Backhoe	3
	Welder	1
Paving	Paver	2
	Paving Equipment	2
	Rollers	2
Architectural Coatings	Air Compressors	1

- To evaluate Project compliance with SCAQMD Rule 403 for fugitive dust control, the Project utilized the mitigation option of watering the Project site three times daily which achieves a control efficiency of 61 percent for PM-10 and PM-2.5 emissions. Two (2) one-way vendor trips per day were added to the grading and paving activities to account for water truck trips.
- Vendor trips from concrete trucks utilized during building construction were based on CalEEMod defaults.
- The VOC content of interior and exterior architectural coatings were changed to 50 grams per liter, pursuant to SCAQMD Rule 1113.
- The Project site earthwork quantities will balance; no soil import or export is required.
- Off-site infrastructure improvements will also be required for recycled water, sewer and storm drain connections as well as roadway improvements to Patterson Avenue and Nevada Avenue along the Project frontage that include parkway landscaping and sidewalks. Additionally, portions of Patterson Avenue and Nevada Avenue are assumed to be paved or re-paved. The underground facilities are assumed to be within the footprint of the roadway improvements. At the time the modeling was prepared, the off-site improvements were assumed to disturb approximately 3.58 acres total. However, the current off-site improvements to be constructed by the Project applicant reflect a total disturbance area of 3.53 acres, which is slightly lower and therefore provides a slightly more conservative analysis.<sup>3</sup>

<sup>3</sup> The 3.53 acres of off-site improvements footprint includes the off-site storm drain lateral extension between the Lateral B Stage 4 stub out and the existing Caltrans facility, across APN(s) 294-220-007 and/or -010 to Patterson Avenue. This lateral extension was evaluated under CEQA by the Riverside County Flood Control & Water Conservation District in the 1991 Perris Valley Master Drainage Plan Initial Study and Negative Declaration (State Clearinghouse No. 91042072).

The results of this analysis are summarized below.

**Table 2 – Unmitigated Estimated Maximum Daily Construction Emissions**

Activity	Peak Daily Emissions (lb/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM-10	PM-2.5
<b>SCAQMD Daily Construction Thresholds</b>	<b>75</b>	<b>100</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
Grading-2022	8.65	<b>92.69</b>	68.72	0.16	10.21	<b>5.23</b>
Building Construction-2022	5.12	31.24	50.33	0.15	10.95	3.67
Building Construction-2023	<b>4.63</b>	26.90	<b>47.52</b>	<b>0.15</b>	<b>10.74</b>	3.48
Paving-2023	<b>89.88</b>	2.07	<b>7.68</b>	<b>0.02</b>	<b>1.71</b>	0.53
Architectural Coatings-2023	<b>1.48</b>	10.30	<b>15.16</b>	<b>0.02</b>	<b>0.69</b>	0.52
<b>Maximum<sup>1</sup></b>	<b>95.99</b>	<b>92.69</b>	<b>70.36</b>	<b>0.19</b>	<b>13.14</b>	<b>5.23</b>
<b>Exceeds Threshold?</b>	<b>Yes</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Note: <sup>1</sup> Maximum emissions are the greater of either grading or building construction alone in 2022, or the sum of building construction, paving and architectural coating in 2023 since these activities overlap. Maximum emissions are shown in bold.

As shown in the table above, the emissions from construction of the Project are below the SCAQMD daily construction thresholds for all the criteria pollutants, except VOC resulting from architectural coatings (painting). Please see the subheading “Recommended Mitigation Measures” for mitigation that reduces the Project’s construction emissions.

### Long-Term Analysis

Long-term emissions are evaluated at build-out of a project. The Project is assumed to be operational in 2023. Mobile source emissions refer to on-road motor vehicle emissions generated from the Project’s traffic and based on trip generation provided in the Traffic Impact Analysis (TIA) for Patterson-Nance Warehouse Project Traffic Impact Analysis (DPR 21-00005).<sup>4</sup> An average truck trip length of approximately 40 miles was assumed, which is recommended by the City and based on SCAQMD’s *Final Staff Report for Proposed Rule 2305 and Rule 316*.<sup>5</sup> On-site service equipment (i.e., forklifts and yard trucks) are proposed to be electric and therefore do not have any direct emissions of criteria pollutants. Area source emissions from the Project include stationary combustion emissions of natural gas used for space and water heating (shown in a separate row as energy), yard and landscape maintenance, and an average building square footage to be repainted each year. CalEEMod computes area source emissions based upon default factors and land use assumptions. CalEEMod defaults also include the 2019 Title 24 energy efficiency standards. Separate emissions were computed for both the summer and winter and are shown in **Table 3** and **Table 4**, respectively.

<sup>4</sup> Albert A. Webb Associates, *Patterson-Nance Warehouse Project Traffic Impact Analysis (DPR 21-00005)*, January 2022.

<sup>5</sup> South Coast Air Quality Management District, Board Meeting Agenda No. 27, May 7, 2021, *Attachment I, Final Staff Report, Proposed Rule 2305 – Warehouse Indirect Source Rule - Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program and Proposed Rule 316 – Fees for Rule 2305*. (Available at <http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10>, accessed January 2022.)

**Table 3 – Unmitigated Estimated Daily Project Operation Emissions (Summer)**

Source	Peak Daily Emissions (lb/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM-10	PM-2.5
<b>SCAQMD Daily Thresholds</b>	<b>55</b>	<b>55</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
Area	17.62	0.00	0.18	0.00	0.00	0.00
Energy	0.05	0.42	0.35	0.00	0.03	0.03
Mobile	5.14	17.78	65.40	0.20	17.33	4.81
<b>Total</b>	<b>22.81</b>	<b>18.20</b>	<b>65.93</b>	<b>0.20</b>	<b>17.36</b>	<b>4.84</b>
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Note: Emissions reported as zero are rounded and not necessarily equal to zero.

**Table 4 – Unmitigated Estimated Daily Project Operation Emissions (Winter)**

Source	Peak Daily Emissions (lb/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM-10	PM-2.5
<b>SCAQMD Daily Thresholds</b>	<b>55</b>	<b>55</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
Area	17.62	0.00	0.18	0.00	0.00	0.00
Energy	0.05	0.42	0.35	0.00	0.03	0.03
Mobile	4.64	18.86	57.06	0.19	17.33	4.81
<b>Total</b>	<b>22.31</b>	<b>19.28</b>	<b>57.59</b>	<b>0.19</b>	<b>17.36</b>	<b>4.84</b>
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Note: Emissions reported as zero are rounded and not necessarily equal to zero.

Evaluation of the data presented on the above tables indicates that criteria pollutant emissions from operation of this Project will not exceed the SCAQMD regional daily thresholds for any pollutant during summer or winter.

## ▪ Localized Significance Threshold Analysis

### Background

As part of the SCAQMD’s environmental justice program, attention has been focused on localized effects of air quality. Staff at SCAQMD has developed localized significance threshold (LST) methodology<sup>6</sup> that can be used by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts (both short- and long-term). LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA). The Project is located in SRA 24.

### Short-Term Analysis

According to the LST methodology, only on-site emissions need to be analyzed. Emissions associated with vendor and worker trips are mobile source emissions that occur off site. The emissions analyzed under the LST methodology are NO<sub>2</sub>, CO, PM-10, and PM-2.5. SCAQMD has provided LST lookup tables<sup>7</sup> to allow users to readily determine if the daily emissions for proposed construction or operational activities could result in significant localized air quality impacts for projects five acres or smaller. The LST methodology and tables can be used as a screening tool to determine if dispersion modeling would be necessary.

The SCAQMD’s Fact Sheet for Applying CalEEMod to Localized Significance Thresholds is used to determine the maximum site acreage that is actively disturbed based on the construction equipment

<sup>6</sup> South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, Revised July 2008. (Available at <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>, accessed January 2022.)

<sup>7</sup> <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>

fleet and equipment hours as estimated in CalEEMod.<sup>8</sup> Based on this SCAQMD guidance and the Project’s equipment list during grading (above), the Project will disturb approximately eleven acres per day during grading.<sup>9</sup> LST thresholds are provided for one-, two-, and five-acre sites. Therefore, the five-acre LST was used to compare the on-site emissions estimated by CalEEMod to provide a conservative analysis. This approach is conservative as it assumes that all on-site emissions associated with Project construction occur within a concentrated five-acre area. The same amount of emissions generated would be distributed over a larger surface area and would therefore result in a lower concentration at the nearest sensitive receptors. As such, the LST for the five-acre site provides a conservative, screening-level analysis.

The LST thresholds are estimated using the maximum daily disturbed area (in acres) and the distance of the Project to the nearest sensitive receptors (in meters). The closest sensitive receptors to the Project site are the existing legal, non-conforming residential properties and/or businesses containing a residential structure located adjacent to the Project site on Patterson Avenue and Nevada Avenue that are designated for Light Industrial or General Industrial uses in the PVCCSP. The closest receptor distance on the LST look-up tables is 25 meters. According to LST methodology, projects with boundaries closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters. Therefore, a receptor distance of 25 meters (85 feet) was used to ensure a conservative analysis. The results are summarized below.

**Table 5 – Unmitigated LST Results for Daily Construction Emissions**

Pollutant	Peak Daily Emissions (lb/day)			
	NO <sub>x</sub>	CO	PM-10	PM-2.5
<b>LST for 5-acre site at 25 meters</b>	<b>270</b>	<b>1,577</b>	<b>13</b>	<b>8</b>
Grading-2022	<b>92.50</b>	<b>67.30</b>	<b>9.80</b>	<b>5.12</b>
Building Construction-2022	16.77	17.44	0.86	0.81
Building Construction-2023	15.44	17.31	0.75	0.70
Paving-2023	10.19	14.58	0.51	0.47
Architectural Coatings-2023	1.74	2.41	0.09	0.09
<b>Maximum<sup>1</sup></b>	<b>92.50</b>	<b>67.30</b>	<b>9.80</b>	<b>5.12</b>
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Note: <sup>1</sup> Maximum emissions are the greater of either grading or building construction alone in 2022, or the sum of building construction, paving and architectural coating in 2023 since these activities overlap. Maximum emissions are shown in bold.

Emissions from construction of the Project will be below the LST established by SCAQMD for 5-acre construction sites in SRA 24.

### Long-Term Analysis

According to the LST methodology, LSTs only apply to the operational phase if a project includes stationary sources or attracts mobile sources that may spend long periods of time idling at the site, such as warehouse/transfer facilities. Therefore, because the proposed Project will operate as a warehouse and has the potential to attract mobile sources that can reasonably be assumed to idle at the site, a long-term LST analysis was prepared for this Project. Although the Project exceeds five acres, per SCAQMD, the LST lookup tables can be used as a screening tool to determine if dispersion modeling would be necessary. Therefore, the Project’s on-site emissions from CalEEMod and LST Look-Up Tables for the 5-acre site were utilized as a screening-level analysis.

<sup>8</sup> <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2>

<sup>9</sup> <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2>

CalEEMod version 2020.4.0 was utilized to estimate the Project’s emissions from trucks traveling on the Project site. An on-site distance of 0.97 miles was conservatively assumed to be traveled for each one of the Project’s truck trips identified in the Traffic Impact Analysis. The output is attached to this memo and summarized below. Idling emissions from trucks at loading docks is not available in CalEEMod; therefore, PM-10 and PM-2.5 idling emissions were calculated separately.<sup>10</sup> The analysis assumed an unmitigated scenario where each truck trip idles for 15-minutes per day, which conservatively overestimates idling emissions. The results were added to the total PM-10 and PM-2.5 emissions from CalEEMod and presented in the table below. The closest sensitive receptors to the Project operations are the existing legal, non-conforming residential properties and/or businesses containing a residential structure located adjacent to the Project site on Patterson Avenue and Nevada Avenue. Therefore, a receptor distance of 25 meters (85 feet) was used to ensure a conservative analysis. The results are summarized below.

**Table 6 – Unmitigated LST Results for Daily Operational Emissions**

Pollutant	Peak Daily Emissions (lb/day)			
	NO <sub>x</sub>	CO	PM-10 <sup>1</sup>	PM-2.5 <sup>1</sup>
<b>LST for 5-acre site at 25 meters</b>	<b>270</b>	<b>1,577</b>	<b>4</b>	<b>2</b>
On-Site Emissions	3.45	2.67	0.19	0.08
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Note: The greater of summer or winter emissions from CalEEMod is shown. Output attached herewith.

<sup>1</sup> CalEEMod output emissions added to idling emissions.

Therefore, as indicated in the table above, Project-related long-term operational emissions will not exceed any SCAQMD operational LST for SRA 24.

### CO Hot Spots Analysis

A carbon monoxide (CO) “hot spot” is a localized concentration of CO that is above the state or federal 1-hour or 8-hour ambient air quality standards (AAQS). Localized high levels of CO are associated with traffic congestion and idling or slow-moving vehicles.

Based on the information presented below, a CO “hot spot” analysis is not needed to determine whether the addition of Project related traffic will contribute to an exceedance of either the state or federal AAQS for CO emissions in the Project area.

The analysis prepared for CO attainment in the South Coast Air Basin by the SCAQMD can be used to assist in evaluating the potential for CO exceedances in the South Coast Air Basin. CO attainment was thoroughly analyzed as part of the SCAQMD’s 2003 Air Quality Management Plan (2003 AQMP)<sup>11</sup> and the Revised 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan).<sup>12</sup> As discussed in the 1992 CO Plan, peak carbon monoxide concentrations in the South Coast Air Basin are due to unusual meteorological and topographical conditions, and not due to the impact of particular intersections (2003 AQMP Appendix V, p. V-4-32). Considering the region’s unique meteorological conditions and the increasingly stringent CO emissions standards, CO modeling was performed as part of the 1992 CO Plan and subsequent plan updates and air quality management plans.

In the 1992 CO Plan, a CO hot spot analysis was conducted for four busy intersections in Los Angeles at the peak morning and afternoon time periods. The intersections evaluated included: Long Beach Blvd. and Imperial Highway (Lynwood); Wilshire Blvd. and Veteran Ave. (Westwood); Sunset Blvd. and

<sup>10</sup> Idling emission factors obtained from EMFAC2017; idling calculations attached herewith

<sup>11</sup> SCAQMD, *2003 Air Quality Management Plan, August 1, 2003*. (Available at <http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/2003-aqmp>, accessed January 2022.)

<sup>12</sup> SCAQMD, *Revision to the 1992 Carbon Monoxide Attainment Plan*, September 1994. (Available at SCAQMD.)

Highland Ave. (Hollywood); and La Cienega Blvd. and Century Blvd. (Inglewood). These analyses did not predict a violation of CO standards. The busiest intersection evaluated in the 1992 CO Plan and subsequent 2003 AQMP was that at Wilshire Blvd. and Veteran Ave., which has a daily traffic volume of approximately 100,000 vehicles per day (2003 AQMP Appendix V, Table 4-7). The Los Angeles County Metropolitan Transportation Authority (MTA)<sup>13</sup> evaluated the LOS in the vicinity of the Wilshire Blvd./Veteran Ave. intersection and found it to be level E at peak morning traffic and Level F at peak afternoon traffic (MTA, Exhibit 2-5 and 2-6). This hot spot analysis was conducted at intersections subject to extremes in vehicle volumes and vehicle congestion, and did not predict any violation of CO standards. Considering Project-related traffic as well as cumulative projects in the opening year, the highest average daily trips would be approximately 22,970 at the intersection of Patterson Avenue and Harley Knox Boulevard, which is lower than the values studied by SCAQMD,<sup>14</sup> Therefore, it can reasonably be concluded that Project-related traffic would not have daily traffic volumes exceeding those at the intersections modeled in the 2003 AQMP, nor would there be any reason unique to the meteorology to conclude that intersections affected by the Project would yield higher CO concentrations if modeled in detail. Thus, the Project would not result in CO hot spots.

## ■ Greenhouse Gas Analysis

Greenhouse gases (GHG) are not presented in lbs/day like criteria pollutants; they are typically evaluated on an annual basis using the metric system. Additionally, unlike the criteria pollutants, GHG do not have adopted significance thresholds associated with them at this time. Several agencies, at various levels, have proposed draft GHG significance thresholds for use in CEQA documents. SCAQMD has been working on GHG thresholds for development projects. The most recent draft proposal was in September 2010<sup>15</sup> and included significance thresholds for residential, commercial, and mixed-use projects at 3,500, 1,400, and 3,000 metric tonnes per year of carbon dioxide equivalents (MTCO<sub>2</sub>E/yr), respectively. Alternatively, a lead agency has the option to use 3,000 MTCO<sub>2</sub>E/yr as a threshold for all non-industrial projects. Although both options are recommended by SCAQMD, a lead agency is advised to use only one option and to use it consistently. In December 2008, the SCAQMD adopted a threshold of 10,000 MTCO<sub>2</sub>E/yr for stationary source projects where SCAQMD is the lead agency. This approach is also widely used by the City of Perris and various other cities in the South Coast Air Basin. Further, this threshold has been applied by the City of Perris for other industrial developments subject to CEQA (First Industrial- Warehouse at Harley Knox Boulevard and Redlands Avenue, IDI Rider 2 & 4 Warehouses, and Duke Warehouse at Perry Street and Barrett Avenue). As such, this threshold is utilized herein to determine if emissions of GHG from this Project will be significant. The SCAQMD significance thresholds also evaluate construction emissions by amortizing them over an expected project life of 30 years.

## Short-Term Analysis

### Construction-Related Emissions

The CalEEMod model calculates GHG emissions from fuel usage by construction equipment and construction-related activities, like construction worker trips, for the Project. The CalEEMod estimate does not analyze emissions from construction-related electricity or natural gas. Construction-related electricity and natural gas emissions vary based on the amount of electric power used during construction and other unknown factors which make them too speculative to quantify. The CalEEMod output results for construction-related GHG emissions present the GHG emissions estimates for the Project for CO<sub>2</sub>, methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and CO<sub>2</sub>E.<sup>16</sup>

<sup>13</sup> Metropolitan Transportation Authority, *2004 Congestion Management Plan for Los Angeles County*, Adopted July 22, 2004. (Available at <https://planning.lacity.org/eir/CrossroadsHwd/deir/files/references/B12.pdf>, accessed January 2022.)

<sup>14</sup> Albert A. Webb Associates, *Patterson-Nance Warehouse Project Traffic Impact Analysis (DPR 21-00005)*, January 2022.

<sup>15</sup> [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf?sfvrsn=2)

<sup>16</sup> CO<sub>2</sub>E is the sum of CO<sub>2</sub> emissions estimated plus the sum of CH<sub>4</sub> and N<sub>2</sub>O emissions estimated multiplied by their respective global warming potential (GWP).



**Table 7 – Project Construction Equipment GHG Emissions**

Year	Metric Tons per year (MT/yr)			
	Total CO <sub>2</sub>	Total CH <sub>4</sub>	Total N <sub>2</sub> O	Total CO <sub>2</sub> E
2022	597.00	0.11	0.02	605.83
2023	1,057.29	0.07	0.07	1,078.63
Total	<b>1,654.29</b>	<b>0.18</b>	<b>0.09</b>	<b>1,684.46</b>
			<b>Amortized</b>	<b>56.15</b>

Evaluation of the table above indicates that an estimated 1,684.46 MTCO<sub>2</sub>E will occur from Project construction equipment over the course of the estimated construction period. The draft SCAQMD GHG threshold Guidance document released in October 2008<sup>17</sup> recommends that construction emissions be amortized for a project lifetime of 30 years to ensure that GHG reduction measures address construction GHG emissions as part of the operational reduction strategies. Therefore, the total GHG emissions from Project construction were amortized and are included in **Table 9**, below.

### Vegetation Change

CalEEMod estimates the GHG emissions associated with the one-time change in vegetation resulting from development and the GHG emissions sequestered as a result of planting new trees on a project site. Planting trees as part of the Project will sequester CO<sub>2</sub> while they are actively growing. Approximately 302 trees from miscellaneous species are estimated to be planted as part of this Project based on the conceptual landscaping plan.<sup>18</sup> As shown in the CalEEMod output (attached), the estimated one-time sequestration of CO<sub>2</sub> from the planting of Project trees is 213.82 MTCO<sub>2</sub>E. Assuming a Project life of 30 years, this equates to a net reduction of 7.13 MTCO<sub>2</sub>E annually. These results were included in the analysis of the Project’s total operational emissions below in **Table 9**.

### Long-Term Analysis

#### Area Source Emissions

CalEEMod estimates the GHG emissions associated with area sources which include landscape equipment emissions, architectural coating, consumer products, and hearths. Landscape equipment servicing the Project site create CO<sub>2</sub> resulting from fuel combustion based on the Project’s land uses. Consumer products consist of consumer use of solvents and personal care products and architectural coatings consist of an average building square footage to be repainted each year. **Table 9** summarizes the Project’s area source emissions.

#### Energy-Related Emissions

CalEEMod estimates the GHG emissions associated with building and parking lot electricity and natural gas usage (non-hearth) for each land use type. Electricity and natural gas used in buildings and parking lots is typically generated at an off-site power plant which indirectly generates GHG emissions. The default energy usage values used in CalEEMod are based on the CEC sponsored California Commercial End Use Survey and Residential Appliance Saturation Survey studies and reflect 2019 Title 24 improvements (CalEEMod User’s Guide, Appendix A). To account for the energy used for parking lot and street lighting, the parking lot lighting energy intensity rate was conservatively applied to the Project site’s concrete parking lot and landscaped areas and the asphalt and non-asphalt offsite improvements.

GHG emissions from the operation of electric forklifts and yard trucks were calculated outside of CalEEMod using data from SCAQMD for forklift and yard truck usage, annual forklift electricity consumption from the Electric Power Research Institute (EPRI), and the default carbon intensity data from CalEEMod for the electricity provider (Southern California Edison (SCE)). The Project is estimated to use approximately 92 forklifts, based on an average usage of 0.12 forklifts per 1,000 square feet of

<sup>17</sup> [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-6/ghg-meeting-6-guidance-document-discussion.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-6/ghg-meeting-6-guidance-document-discussion.pdf?sfvrsn=2)

<sup>18</sup> Hunter Landscape, *Duke Patterson and Nance Preliminary Landscape Plan*, March 17, 2022.

building area provided by SCAQMD (769,668 /1,000 \*0.12 = 92.36).<sup>19</sup> The typical annual electricity usage from electric forklifts is between 12,960 to 25,932 kilowatt-hours (kWh).<sup>20</sup> The mid-point of 19,446 kWh per year per forklift was used, which equals approximately 1,796 megawatt-hours (MWh) per year. The Project is estimated to use approximately three-yard trucks, based on an average of 3.6-yard trucks per million square feet provided by SCAQMD (0.77 million square feet x 3.6 = 2.77).<sup>21</sup> The estimated annual electricity usage from each electric yard truck is 84 kWh ((84 kWh x 2.77 x 365)/1,000 = 85 MWh), which equals approximately 85 MWh per year for the Project.<sup>22</sup> The GHG emissions calculations are attached herewith.

The GHG emissions from electricity usage from the future electric vehicle (EV) charging stations serving the Project site’s designated 24 EV charging spaces were also estimated outside CalEEMod. Emissions were estimated using data from SCAQMD for EV charging station usage and the CalEEMod default SCE carbon intensity data. It was assumed that each designated EV charging space would contain one charger and, based on SCAQMD<sup>23</sup> data, that each charger would be a 50-kilowatt (kW) charger used approximately 10 hours per day or five separate two-hour charging events. Based on these assumptions, each EV charger would use approximately 450 kWh of electricity per day.

The following table summarizes the GHG emissions estimates reported by CalEEMod for the Project based on the assumptions described previously.

**Table 8 – Energy-Related GHG Emissions**

Source	Metric Tons per year (MT/yr)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Total CO <sub>2</sub> E
Electricity <sup>1</sup>	375.58	0.03	0.00	1,415.53
Natural Gas	82.56	0.00	0.00	83.05
<b>Total</b>	<b>458.14</b>	<b>0.03</b>	<b>0.00</b>	<b>1,498.58</b>

Note: Emissions reported as zero are rounded and not necessarily equal to zero.

<sup>1</sup> Total MTCO<sub>2</sub>E emission include building energy usage estimated in CalEEMod plus the estimated forklift, yard truck, and EV charging station electricity usage calculated outside of CalEEMod. Calculations attached herewith.

### Mobile Source Emissions

CalEEMod estimates the annual GHG emissions from Project-related vehicle usage based on trip generation data contained in defaults or in a project-specific traffic analyses. As stated above, the trip generation rate and fleet mix were adjusted based on the rates and ratios found in the Project-specific TIA. Trip length data was based on CalEEMod defaults for passenger cars and the distance of 40 miles for Project trucks was used, as stated above. **Table 9** shows the mobile source emissions from the Project.

### Solid Waste Emissions

CalEEMod also calculates the GHG emissions associated with the disposal of solid waste into landfills based on default data contained within the model for waste disposal rates, composition, and the characteristics of landfills throughout the state. A large percentage of this waste will be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted will be disposed of at a landfill. This analysis assumes a solid waste diversion from the landfills consistent with the most recent data provided by the

<sup>19</sup> SCAQMD, *SCAQMD High Cube Truck Trip Warehouse Study White Paper Summary of Business Survey Results*, June 2014. Available at: <https://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/business-survey-summary.pdf?sfvrsn=2>

<sup>20</sup> [https://ww2.arb.ca.gov/sites/default/files/classic/fuels/lcfs/electricity/epri\\_2015.pdf](https://ww2.arb.ca.gov/sites/default/files/classic/fuels/lcfs/electricity/epri_2015.pdf)

<sup>21</sup> SCAQMD, *Governing Board Meeting Agenda: May 7, 2021. Item 27: Certify Final Environmental Assessment and Adopt Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions Program, and Proposed Rule 316 – Fees for Rule 2305, Submit Rule 2305 for Inclusion Into the SIP, and Approve Supporting Budget Actions*, May 2021. Available at: <http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10>.

<sup>22</sup> *Ibid.*

<sup>23</sup> *Ibid.*

state, 37 percent.<sup>24</sup> The waste diversion rate was evaluated in the model by selecting the mitigation option for solid waste and **Table 9** shows the solid waste emissions from the Project utilizing this waste reduction rate.

### Water-Related Energy Usage

Electricity is also indirectly used in water supply, treatment, and distribution, as well as wastewater treatment in Southern California and plays a large role in GHG production.

There are three processes necessary to supply potable water to urban users (i.e., residential, commercial, and industrial): (1) supply and conveyance of the water from the source; (2) treatment of the water to potable standards; and (3) distribution of the water to individual users. After use, the wastewater is treated and either reused as reclaimed/recycled water or returned to the environment. CalEEMod calculates the GHG emissions from these processes based on default emissions factors and water/wastewater generation rates for a project’s location. Default values were used for electricity intensity factor associated with the supply and conveyance of water from its source which assumes that the water is being imported from Northern California. Total water demand was obtained from the Water Supply Assessment,<sup>25</sup> using the average daily demand. Outdoor water demand was obtained from the Recycled Water Use Exhibit.<sup>26</sup> Since the Project’s source for outdoor water supply is recycled water (instead of potable), this was evaluated in the model by selecting the mitigation option for reclaimed water for 100 percent outdoor water use. **Table 9** shows the GHG emissions from water-related energy usage for the Project.

### Total Project GHG Emissions

As shown on **Table 9 – Total Project-Related GHG Emissions**, using all the emissions quantified above, the total GHG emissions generated from the Project is approximately 5,154.35 MTCO<sub>2</sub>E/yr which includes vegetation changes and construction-related emissions amortized over a typical project life of 30 years.

**Table 9 – Total Project-Related GHG Emissions**

Source	Metric Tons per year (MT/yr)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Total CO <sub>2</sub> E
Amortized Construction	--	--	--	56.15
Vegetation	--	--	--	-7.13
Area	0.04	0.00	0.00	0.05
Energy	458.14	0.03	0.00	1,498.58
Mobile	3,280.46	0.12	0.27	3,362.97
Solid Waste	92.52	5.47	0.00	229.22
Water	10.68	0.12	0.00	14.51
<b>Total</b>	<b>3,841.84</b>	<b>5.74</b>	<b>0.27</b>	<b>5,154.35</b>

Note: Emissions reported as zero are rounded and not necessarily equal to zero.

The total GHG emissions from the Project do not exceed the SCAQMD interim threshold of level of 10,000 MTCO<sub>2</sub>E/yr for industrial projects.

<sup>24</sup> CalRecycle, *California's 2019 Per Capita Disposal Rate Estimate*, webpage. Available at: <https://www.calrecycle.ca.gov/lqcentral/goalmeasure/disposalrate/mostrecent>, accessed January 2022.

<sup>25</sup> Eastern Municipal Water District, *Water Supply Assessment Report, Patterson and Nance*, February 16, 2022.

<sup>26</sup> Albert A Webb Associates, *Recycled Water Use Exhibit*, April 15, 2022.

## ▪ Recommended Mitigation Measures

The following mitigation measure identified in the Perris Valley Commerce Center Specific Plan EIR is recommended to reduce VOC emissions from Project construction:

**MM AQ 1:** To reduce VOC emissions associated with architectural coating, the project designer and contractor shall reduce the use of paints and solvents by utilizing pre-coated materials (e.g. bathroom stall dividers, metal awnings), materials that do not require painting, and require coatings and solvents with a VOC content lower than required under Rule 1113 to be utilized. The construction contractor shall be required to utilize “Super-Compliant” VOC paints, which are defined in SCAQMD’s Rule 1113. Construction specifications shall be included in building specifications that assure these requirements are implemented. The specifications for each implementing development project shall be reviewed by the City of Perris’ Building Division for compliance with this mitigation measure prior to issuance of a building permit for that project.

## ▪ Impacts after Mitigation

Implementation of mitigation measure **MM AQ 1** will reduce the Project’s short-term construction-related emissions. **MM AQ 1** has quantitative reductions associated with it available in CalEEMod. The mitigated emissions are shown in **Table 10**, below, and indicate that VOC emissions from architectural coatings (painting) activities will be reduced below the SCAQMD thresholds.

**Table 10 – Mitigated Estimated Daily Construction Emissions**

Activity	Peak Daily Emissions (lb/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM-10	PM-2.5
<b>SCAQMD Daily Construction Thresholds</b>	<b>75</b>	<b>100</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
Grading-2022 <sup>1</sup>	8.65	<b>92.69</b>	68.72	0.16	10.21	<b>5.23</b>
Building Construction-2022 <sup>1</sup>	5.12	31.24	50.33	0.15	10.95	3.67
Building Construction-2023 <sup>1</sup>	<b>4.63</b>	26.90	<b>47.52</b>	<b>0.15</b>	<b>10.74</b>	3.48
Architectural Coatings-2023	<b>23.51</b>	2.07	<b>7.68</b>	<b>0.02</b>	<b>1.71</b>	0.53
Paving-2023 <sup>1</sup>	<b>1.48</b>	10.30	<b>15.16</b>	<b>0.02</b>	<b>0.69</b>	0.52
<b>Maximum<sup>2</sup></b>	<b>29.62</b>	<b>92.69</b>	<b>70.36</b>	<b>0.19</b>	<b>13.14</b>	<b>5.23</b>
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Notes: <sup>1</sup>Maximum emissions are from Table 2.

<sup>2</sup> Maximum emissions are the greater of either grading or building construction alone in 2022, or the sum of building construction, paving and architectural coating in 2023 since these activities overlap. Maximum emissions are shown in bold.

With implementation of **MM AQ 1**, VOC emissions associated with painting activities will be reduced below applicable thresholds.

## ▪ Conclusion

The conclusion of this analysis indicates that construction of the proposed Project will not exceed criteria pollutant thresholds established by SCAQMD on a regional level with implementation of mitigation. The analysis also concludes that operation of the proposed Project will not exceed criteria pollutant thresholds established by SCAQMD on a regional level. The Project’s construction and operation will not exceed criteria pollutant thresholds established by SCAQMD on a localized level. In addition, the Project will not create a CO hot spot. The Project’s GHG emissions will not exceed the SCAQMD interim threshold of 10,000 MTCO<sub>2</sub>E/yr.

Should you have any questions, please contact me at (951) 686-1070.

# CalEEMod Output Files

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Duke Warehouse at Patterson Ave and Nance St  
Riverside-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	769.67	1000sqft	17.44	769,668.00	0
Other Asphalt Surfaces	135.47	1000sqft	3.11	135,472.00	0
Other Non-Asphalt Surfaces	813.62	1000sqft	18.68	813,618.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10	<b>Operational Year</b>	2023		
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	390.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use - Per Site Plan, includes paved and unpaved offsite improvements.

Construction Phase - Per Applicant

Off-road Equipment - Per Applicant

Off-road Equipment - 8 hours per day

Off-road Equipment -

Off-road Equipment - 8 hours per day.

Grading -

Trips and VMT - Two (2) daily water truck trips added to grading and paving activities per Rule 403.

Architectural Coating - Per Rule 1113.

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Vehicle Trips - Per TIA.

Fleet Mix - Per TIA.

Energy Use - Added 0.35 lighting energy intensity to account for parking lot lighting.

Water And Wastewater - Per WSA and RWUE

Sequestration - Per Landscape Plan

Construction Off-road Equipment Mitigation - 3 times per - Rule 403

Water Mitigation - Per RWUE

Waste Mitigation - Per CalRecycle

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblConstructionPhase	NumDays	55.00	43.00
tblConstructionPhase	NumDays	740.00	195.00
tblConstructionPhase	NumDays	75.00	43.00
tblConstructionPhase	NumDays	55.00	21.00
tblConstructionPhase	PhaseEndDate	7/8/2026	7/31/2023
tblConstructionPhase	PhaseEndDate	2/4/2026	7/31/2023
tblConstructionPhase	PhaseEndDate	4/5/2023	10/31/2022
tblConstructionPhase	PhaseEndDate	4/22/2026	7/31/2023
tblConstructionPhase	PhaseStartDate	4/23/2026	6/1/2023
tblConstructionPhase	PhaseStartDate	4/6/2023	11/1/2022
tblConstructionPhase	PhaseStartDate	12/22/2022	9/1/2022
tblConstructionPhase	PhaseStartDate	2/5/2026	7/1/2023
tblEnergyUse	LightingElect	0.00	0.35
tblEnergyUse	LightingElect	0.00	0.35
tblFleetMix	HHD	0.02	0.10
tblFleetMix	LDA	0.53	0.57
tblFleetMix	LDT1	0.06	0.06

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tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.3100e-003	0.03
tblFleetMix	MCY	0.02	0.03
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.4680e-003	5.8000e-003
tblFleetMix	MHD	0.01	0.03
tblFleetMix	OBUS	6.1600e-004	6.5000e-004
tblFleetMix	SBUS	1.1000e-003	1.1700e-003
tblFleetMix	UBUS	3.1500e-004	3.3000e-004
tblLandUse	LotAcreage	17.67	17.44
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSequestration	NumberOfNewTrees	0.00	302.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblVehicleTrips	CNW_TL	6.90	40.00
tblVehicleTrips	CNW_TTP	41.00	15.70
tblVehicleTrips	CW_TTP	59.00	84.30
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.74	1.40
tblVehicleTrips	SU_TR	1.74	1.40
tblVehicleTrips	WD_TR	1.74	1.40
tblWater	IndoorWaterUseRate	177,986,187.50	3,620,205.00
tblWater	OutdoorWaterUseRate	0.00	3,150,979.00



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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	8.6814	92.6784	68.7191	0.1571	15.9706	3.7328	19.7034	4.4483	3.4342	7.8825	0.0000	15,592.3851	15,592.3851	4.8067	0.9904	15,910.3672
2023	95.9878	38.6327	70.3628	0.1918	11.6665	1.4796	13.1461	3.1354	1.3864	4.5218	0.0000	19,337.5505	19,337.5505	1.6595	0.9842	19,672.3305
Maximum	95.9878	92.6784	70.3628	0.1918	15.9706	3.7328	19.7034	4.4483	3.4342	7.8825	0.0000	19,337.5505	19,337.5505	4.8067	0.9904	19,672.3305

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	8.6814	92.6784	68.7191	0.1571	9.8765	3.7328	10.9531	2.6604	3.4342	5.2346	0.0000	15,592.3851	15,592.3851	4.8067	0.9904	15,910.3672
2023	95.9878	38.6327	70.3628	0.1918	11.6665	1.4796	13.1461	3.1354	1.3864	4.5218	0.0000	19,337.5505	19,337.5505	1.6595	0.9842	19,672.3305
Maximum	95.9878	92.6784	70.3628	0.1918	11.6665	3.7328	13.1461	3.1354	3.4342	5.2346	0.0000	19,337.5505	19,337.5505	4.8067	0.9904	19,672.3305

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	22.05	0.00	26.64	23.58	0.00	21.35	0.00	0.00	0.00	0.00	0.00	0.00

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	17.6189	1.6000e-003	0.1755	1.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004		0.3762	0.3762	9.9000e-004		0.4008
Energy	0.0457	0.4155	0.3491	2.4900e-003		0.0316	0.0316		0.0316	0.0316		498.6407	498.6407	9.5600e-003	9.1400e-003	501.6038
Mobile	5.1434	17.7816	65.4002	0.2010	17.1004	0.2325	17.3329	4.5909	0.2204	4.8113		20,744.7908	20,744.7908	0.7498	1.5965	21,239.2995
<b>Total</b>	<b>22.8080</b>	<b>18.1987</b>	<b>65.9247</b>	<b>0.2035</b>	<b>17.1004</b>	<b>0.2647</b>	<b>17.3651</b>	<b>4.5909</b>	<b>0.2526</b>	<b>4.8435</b>		<b>21,243.8076</b>	<b>21,243.8076</b>	<b>0.7604</b>	<b>1.6057</b>	<b>21,741.3041</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	17.6189	1.6000e-003	0.1755	1.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004		0.3762	0.3762	9.9000e-004		0.4008
Energy	0.0457	0.4155	0.3491	2.4900e-003		0.0316	0.0316		0.0316	0.0316		498.6407	498.6407	9.5600e-003	9.1400e-003	501.6038
Mobile	5.1434	17.7816	65.4002	0.2010	17.1004	0.2325	17.3329	4.5909	0.2204	4.8113		20,744.7908	20,744.7908	0.7498	1.5965	21,239.2995
<b>Total</b>	<b>22.8080</b>	<b>18.1987</b>	<b>65.9247</b>	<b>0.2035</b>	<b>17.1004</b>	<b>0.2647</b>	<b>17.3651</b>	<b>4.5909</b>	<b>0.2526</b>	<b>4.8435</b>		<b>21,243.8076</b>	<b>21,243.8076</b>	<b>0.7604</b>	<b>1.6057</b>	<b>21,741.3041</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	9/1/2022	10/31/2022	5	43	
2	Building Construction	Building Construction	11/1/2022	7/31/2023	5	195	
3	Paving	Paving	7/1/2023	7/31/2023	5	21	
4	Architectural Coating	Architectural Coating	6/1/2023	7/31/2023	5	43	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 387**

**Acres of Paving: 21.79**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,154,502; Non-Residential Outdoor: 384,834; Striped Parking Area: 56,945 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	8.00	78	0.48
Building Construction	Cranes	1	8.00	231	0.29
Grading	Excavators	2	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	2	8.00	130	0.42

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	8	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	14	35.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	722.00	282.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	144.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Grading - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					15.5666	0.0000	15.5666	4.3408	0.0000	4.3408			0.0000			0.0000
Off-Road	8.5403	92.5045	67.2963	0.1532		3.7296	3.7296		3.4313	3.4313		14,833.17 40	14,833.17 40	4.7974		14,953.10 77
<b>Total</b>	<b>8.5403</b>	<b>92.5045</b>	<b>67.2963</b>	<b>0.1532</b>	<b>15.5666</b>	<b>3.7296</b>	<b>19.2962</b>	<b>4.3408</b>	<b>3.4313</b>	<b>7.7721</b>		<b>14,833.17 40</b>	<b>14,833.17 40</b>	<b>4.7974</b>		<b>14,953.10 77</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.2500e-003	0.0846	0.0294	3.6000e-004	0.0128	1.2200e-003	0.0140	3.6900e-003	1.1700e-003	4.8600e-003		38.5891	38.5891	4.1000e-004	5.7200e-003	40.3046
Worker	0.1379	0.0894	1.3934	3.5600e-003	0.3912	1.9500e-003	0.3932	0.1038	1.7900e-003	0.1055		359.4129	359.4129	8.9600e-003	8.9000e-003	362.2882
<b>Total</b>	<b>0.1411</b>	<b>0.1739</b>	<b>1.4228</b>	<b>3.9200e-003</b>	<b>0.4040</b>	<b>3.1700e-003</b>	<b>0.4072</b>	<b>0.1074</b>	<b>2.9600e-003</b>	<b>0.1104</b>		<b>398.0020</b>	<b>398.0020</b>	<b>9.3700e-003</b>	<b>0.0146</b>	<b>402.5928</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Grading - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0710	0.0000	6.0710	1.6929	0.0000	1.6929			0.0000			0.0000
Off-Road	8.5403	92.5045	67.2963	0.1532		3.7296	3.7296		3.4313	3.4313	0.0000	14,833.17 40	14,833.17 40	4.7974		14,953.10 77
<b>Total</b>	<b>8.5403</b>	<b>92.5045</b>	<b>67.2963</b>	<b>0.1532</b>	<b>6.0710</b>	<b>3.7296</b>	<b>9.8006</b>	<b>1.6929</b>	<b>3.4313</b>	<b>5.1242</b>	<b>0.0000</b>	<b>14,833.17 40</b>	<b>14,833.17 40</b>	<b>4.7974</b>		<b>14,953.10 77</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.2500e-003	0.0846	0.0294	3.6000e-004	0.0128	1.2200e-003	0.0140	3.6900e-003	1.1700e-003	4.8600e-003		38.5891	38.5891	4.1000e-004	5.7200e-003	40.3046
Worker	0.1379	0.0894	1.3934	3.5600e-003	0.3912	1.9500e-003	0.3932	0.1038	1.7900e-003	0.1055		359.4129	359.4129	8.9600e-003	8.9000e-003	362.2882
<b>Total</b>	<b>0.1411</b>	<b>0.1739</b>	<b>1.4228</b>	<b>3.9200e-003</b>	<b>0.4040</b>	<b>3.1700e-003</b>	<b>0.4072</b>	<b>0.1074</b>	<b>2.9600e-003</b>	<b>0.1104</b>		<b>398.0020</b>	<b>398.0020</b>	<b>9.3700e-003</b>	<b>0.0146</b>	<b>402.5928</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122		2,737.1520	2,737.1520	0.6711		2,753.9288
<b>Total</b>	<b>1.8146</b>	<b>16.7670</b>	<b>17.4392</b>	<b>0.0288</b>		<b>0.8645</b>	<b>0.8645</b>		<b>0.8122</b>	<b>0.8122</b>		<b>2,737.1520</b>	<b>2,737.1520</b>	<b>0.6711</b>		<b>2,753.9288</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4589	11.9247	4.1463	0.0513	1.8063	0.1719	1.9782	0.5201	0.1645	0.6846		5,441.0585	5,441.0585	0.0576	0.8069	5,682.9499
Worker	2.8444	1.8432	28.7428	0.0734	8.0703	0.0402	8.1104	2.1403	0.0370	2.1772		7,414.1746	7,414.1746	0.1848	0.1835	7,473.4886
<b>Total</b>	<b>3.3033</b>	<b>13.7678</b>	<b>32.8891</b>	<b>0.1247</b>	<b>9.8765</b>	<b>0.2121</b>	<b>10.0886</b>	<b>2.6604</b>	<b>0.2015</b>	<b>2.8618</b>		<b>12,855.2331</b>	<b>12,855.2331</b>	<b>0.2424</b>	<b>0.9904</b>	<b>13,156.4385</b>



Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Building Construction - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122	0.0000	2,737.1520	2,737.1520	0.6711		2,753.9288
<b>Total</b>	<b>1.8146</b>	<b>16.7670</b>	<b>17.4392</b>	<b>0.0288</b>		<b>0.8645</b>	<b>0.8645</b>		<b>0.8122</b>	<b>0.8122</b>	<b>0.0000</b>	<b>2,737.1520</b>	<b>2,737.1520</b>	<b>0.6711</b>		<b>2,753.9288</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4589	11.9247	4.1463	0.0513	1.8063	0.1719	1.9782	0.5201	0.1645	0.6846		5,441.0585	5,441.0585	0.0576	0.8069	5,682.9499
Worker	2.8444	1.8432	28.7428	0.0734	8.0703	0.0402	8.1104	2.1403	0.0370	2.1772		7,414.1746	7,414.1746	0.1848	0.1835	7,473.4886
<b>Total</b>	<b>3.3033</b>	<b>13.7678</b>	<b>32.8891</b>	<b>0.1247</b>	<b>9.8765</b>	<b>0.2121</b>	<b>10.0886</b>	<b>2.6604</b>	<b>0.2015</b>	<b>2.8618</b>		<b>12,855.2331</b>	<b>12,855.2331</b>	<b>0.2424</b>	<b>0.9904</b>	<b>13,156.4385</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Building Construction - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6735	15.4377	17.3101	0.0288		0.7481	0.7481		0.7029	0.7029		2,738.1535	2,738.1535	0.6670		2,754.8288
<b>Total</b>	<b>1.6735</b>	<b>15.4377</b>	<b>17.3101</b>	<b>0.0288</b>		<b>0.7481</b>	<b>0.7481</b>		<b>0.7029</b>	<b>0.7029</b>		<b>2,738.1535</b>	<b>2,738.1535</b>	<b>0.6670</b>		<b>2,754.8288</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3179	9.2131	3.7935	0.0493	1.8062	0.0802	1.8865	0.5201	0.0768	0.5968		5,224.6423	5,224.6423	0.0533	0.7721	5,456.0438
Worker	2.6362	1.6289	26.4159	0.0710	8.0703	0.0377	8.1080	2.1403	0.0347	2.1750		7,174.8052	7,174.8052	0.1659	0.1694	7,229.4275
<b>Total</b>	<b>2.9540</b>	<b>10.8420</b>	<b>30.2094</b>	<b>0.1203</b>	<b>9.8765</b>	<b>0.1180</b>	<b>9.9945</b>	<b>2.6603</b>	<b>0.1115</b>	<b>2.7718</b>		<b>12,399.4475</b>	<b>12,399.4475</b>	<b>0.2192</b>	<b>0.9414</b>	<b>12,685.4712</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Building Construction - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6735	15.4377	17.3101	0.0288		0.7481	0.7481		0.7029	0.7029	0.0000	2,738.1535	2,738.1535	0.6670		2,754.8288
<b>Total</b>	<b>1.6735</b>	<b>15.4377</b>	<b>17.3101</b>	<b>0.0288</b>		<b>0.7481</b>	<b>0.7481</b>		<b>0.7029</b>	<b>0.7029</b>	<b>0.0000</b>	<b>2,738.1535</b>	<b>2,738.1535</b>	<b>0.6670</b>		<b>2,754.8288</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3179	9.2131	3.7935	0.0493	1.8062	0.0802	1.8865	0.5201	0.0768	0.5968		5,224.6423	5,224.6423	0.0533	0.7721	5,456.0438
Worker	2.6362	1.6289	26.4159	0.0710	8.0703	0.0377	8.1080	2.1403	0.0347	2.1750		7,174.8052	7,174.8052	0.1659	0.1694	7,229.4275
<b>Total</b>	<b>2.9540</b>	<b>10.8420</b>	<b>30.2094</b>	<b>0.1203</b>	<b>9.8765</b>	<b>0.1180</b>	<b>9.9945</b>	<b>2.6603</b>	<b>0.1115</b>	<b>2.7718</b>		<b>12,399.4475</b>	<b>12,399.4475</b>	<b>0.2192</b>	<b>0.9414</b>	<b>12,685.4712</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.4 Paving - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.3880					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.4208</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>		<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2500e-003	0.0653	0.0269	3.5000e-004	0.0128	5.7000e-004	0.0134	3.6900e-003	5.4000e-004	4.2300e-003		37.0542	37.0542	3.8000e-004	5.4800e-003	38.6954
Worker	0.0548	0.0338	0.5488	1.4700e-003	0.1677	7.8000e-004	0.1685	0.0445	7.2000e-004	0.0452		149.0611	149.0611	3.4500e-003	3.5200e-003	150.1959
<b>Total</b>	<b>0.0570</b>	<b>0.0992</b>	<b>0.5757</b>	<b>1.8200e-003</b>	<b>0.1805</b>	<b>1.3500e-003</b>	<b>0.1818</b>	<b>0.0482</b>	<b>1.2600e-003</b>	<b>0.0494</b>		<b>186.1153</b>	<b>186.1153</b>	<b>3.8300e-003</b>	<b>9.0000e-003</b>	<b>188.8912</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.4 Paving - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.3880					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.4208</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>	<b>0.0000</b>	<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2500e-003	0.0653	0.0269	3.5000e-004	0.0128	5.7000e-004	0.0134	3.6900e-003	5.4000e-004	4.2300e-003		37.0542	37.0542	3.8000e-004	5.4800e-003	38.6954
Worker	0.0548	0.0338	0.5488	1.4700e-003	0.1677	7.8000e-004	0.1685	0.0445	7.2000e-004	0.0452		149.0611	149.0611	3.4500e-003	3.5200e-003	150.1959
<b>Total</b>	<b>0.0570</b>	<b>0.0992</b>	<b>0.5757</b>	<b>1.8200e-003</b>	<b>0.1805</b>	<b>1.3500e-003</b>	<b>0.1818</b>	<b>0.0482</b>	<b>1.2600e-003</b>	<b>0.0494</b>		<b>186.1153</b>	<b>186.1153</b>	<b>3.8300e-003</b>	<b>9.0000e-003</b>	<b>188.8912</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.5 Architectural Coating - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	89.1012					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944		375.2641	375.2641	0.0225		375.8253
<b>Total</b>	<b>89.3567</b>	<b>1.7373</b>	<b>2.4148</b>	<b>3.9600e-003</b>		<b>0.0944</b>	<b>0.0944</b>		<b>0.0944</b>	<b>0.0944</b>		<b>375.2641</b>	<b>375.2641</b>	<b>0.0225</b>		<b>375.8253</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.5258	0.3249	5.2686	0.0142	1.6096	7.5300e-003	1.6171	0.4269	6.9300e-003	0.4338		1,430.9861	1,430.9861	0.0331	0.0338	1,441.8803
<b>Total</b>	<b>0.5258</b>	<b>0.3249</b>	<b>5.2686</b>	<b>0.0142</b>	<b>1.6096</b>	<b>7.5300e-003</b>	<b>1.6171</b>	<b>0.4269</b>	<b>6.9300e-003</b>	<b>0.4338</b>		<b>1,430.9861</b>	<b>1,430.9861</b>	<b>0.0331</b>	<b>0.0338</b>	<b>1,441.8803</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.5 Architectural Coating - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	89.1012					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944	0.0000	375.2641	375.2641	0.0225		375.8253
<b>Total</b>	<b>89.3567</b>	<b>1.7373</b>	<b>2.4148</b>	<b>3.9600e-003</b>		<b>0.0944</b>	<b>0.0944</b>		<b>0.0944</b>	<b>0.0944</b>	<b>0.0000</b>	<b>375.2641</b>	<b>375.2641</b>	<b>0.0225</b>		<b>375.8253</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.5258	0.3249	5.2686	0.0142	1.6096	7.5300e-003	1.6171	0.4269	6.9300e-003	0.4338		1,430.9861	1,430.9861	0.0331	0.0338	1,441.8803
<b>Total</b>	<b>0.5258</b>	<b>0.3249</b>	<b>5.2686</b>	<b>0.0142</b>	<b>1.6096</b>	<b>7.5300e-003</b>	<b>1.6171</b>	<b>0.4269</b>	<b>6.9300e-003</b>	<b>0.4338</b>		<b>1,430.9861</b>	<b>1,430.9861</b>	<b>0.0331</b>	<b>0.0338</b>	<b>1,441.8803</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.1434	17.7816	65.4002	0.2010	17.1004	0.2325	17.3329	4.5909	0.2204	4.8113		20,744.79 08	20,744.79 08	0.7498	1.5965	21,239.29 95
Unmitigated	5.1434	17.7816	65.4002	0.2010	17.1004	0.2325	17.3329	4.5909	0.2204	4.8113		20,744.79 08	20,744.79 08	0.7498	1.5965	21,239.29 95

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	1,077.54	1,077.54	1,077.54	7,951,847	7,951,847
<b>Total</b>	<b>1,077.54</b>	<b>1,077.54</b>	<b>1,077.54</b>	<b>7,951,847</b>	<b>7,951,847</b>

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	40.00	84.30	0.00	15.70	100	0	0



Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Non-Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Unrefrigerated Warehouse-No Rail	0.567150	0.059410	0.183070	0.000000	0.000000	0.026000	0.032500	0.098420	0.000650	0.000330	0.025500	0.001170	0.005800

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0457	0.4155	0.3491	2.4900e-003		0.0316	0.0316		0.0316	0.0316		498.6407	498.6407	9.5600e-003	9.1400e-003	501.6038
NaturalGas Unmitigated	0.0457	0.4155	0.3491	2.4900e-003		0.0316	0.0316		0.0316	0.0316		498.6407	498.6407	9.5600e-003	9.1400e-003	501.6038

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.2 Energy by Land Use - Natural Gas**

**Unmitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	4238.45	0.0457	0.4155	0.3491	2.4900e-003		0.0316	0.0316		0.0316	0.0316		498.6407	498.6407	9.5600e-003	9.1400e-003	501.6038
<b>Total</b>		<b>0.0457</b>	<b>0.4155</b>	<b>0.3491</b>	<b>2.4900e-003</b>		<b>0.0316</b>	<b>0.0316</b>		<b>0.0316</b>	<b>0.0316</b>		<b>498.6407</b>	<b>498.6407</b>	<b>9.5600e-003</b>	<b>9.1400e-003</b>	<b>501.6038</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.2 Energy by Land Use - NaturalGas**

Mitigated

	NaturalGas s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	4.23845	0.0457	0.4155	0.3491	2.4900e-003		0.0316	0.0316		0.0316	0.0316		498.6407	498.6407	9.5600e-003	9.1400e-003	501.6038
<b>Total</b>		<b>0.0457</b>	<b>0.4155</b>	<b>0.3491</b>	<b>2.4900e-003</b>		<b>0.0316</b>	<b>0.0316</b>		<b>0.0316</b>	<b>0.0316</b>		<b>498.6407</b>	<b>498.6407</b>	<b>9.5600e-003</b>	<b>9.1400e-003</b>	<b>501.6038</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	17.6189	1.6000e-003	0.1755	1.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004		0.3762	0.3762	9.9000e-004		0.4008
Unmitigated	17.6189	1.6000e-003	0.1755	1.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004		0.3762	0.3762	9.9000e-004		0.4008

**6.2 Area by SubCategory**

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0271					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	15.5756					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0163	1.6000e-003	0.1755	1.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004		0.3762	0.3762	9.9000e-004		0.4008
<b>Total</b>	<b>17.6189</b>	<b>1.6000e-003</b>	<b>0.1755</b>	<b>1.0000e-005</b>		<b>6.3000e-004</b>	<b>6.3000e-004</b>		<b>6.3000e-004</b>	<b>6.3000e-004</b>		<b>0.3762</b>	<b>0.3762</b>	<b>9.9000e-004</b>		<b>0.4008</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0271					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	15.5756					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0163	1.6000e-003	0.1755	1.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004		0.3762	0.3762	9.9000e-004		0.4008
<b>Total</b>	<b>17.6189</b>	<b>1.6000e-003</b>	<b>0.1755</b>	<b>1.0000e-005</b>		<b>6.3000e-004</b>	<b>6.3000e-004</b>		<b>6.3000e-004</b>	<b>6.3000e-004</b>		<b>0.3762</b>	<b>0.3762</b>	<b>9.9000e-004</b>		<b>0.4008</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

Use Reclaimed Water

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Duke Warehouse at Patterson Ave and Nance St  
Riverside-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	769.67	1000sqft	17.44	769,668.00	0
Other Asphalt Surfaces	135.47	1000sqft	3.11	135,472.00	0
Other Non-Asphalt Surfaces	813.62	1000sqft	18.68	813,618.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2023
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	390.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use - Per Site Plan, includes paved and unpaved offsite improvements.

Construction Phase - Per Applicant

Off-road Equipment - Per Applicant

Off-road Equipment - 8 hours per day

Off-road Equipment -

Off-road Equipment - 8 hours per day.

Grading -

Trips and VMT - Two (2) daily water truck trips added to grading and paving activities per Rule 403.

Architectural Coating - Per Rule 1113.

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Vehicle Trips - Per TIA.

Fleet Mix - Per TIA.

Energy Use - Added 0.35 lighting energy intensity to account for parking lot lighting.

Water And Wastewater - Per WSA and RWUE

Sequestration - Per Landscape Plan

Construction Off-road Equipment Mitigation - 3 times per - Rule 403

Water Mitigation - Per RWUE

Waste Mitigation - Per CalRecycle

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblConstructionPhase	NumDays	55.00	43.00
tblConstructionPhase	NumDays	740.00	195.00
tblConstructionPhase	NumDays	75.00	43.00
tblConstructionPhase	NumDays	55.00	21.00
tblConstructionPhase	PhaseEndDate	7/8/2026	7/31/2023
tblConstructionPhase	PhaseEndDate	2/4/2026	7/31/2023
tblConstructionPhase	PhaseEndDate	4/5/2023	10/31/2022
tblConstructionPhase	PhaseEndDate	4/22/2026	7/31/2023
tblConstructionPhase	PhaseStartDate	4/23/2026	6/1/2023
tblConstructionPhase	PhaseStartDate	4/6/2023	11/1/2022
tblConstructionPhase	PhaseStartDate	12/22/2022	9/1/2022
tblConstructionPhase	PhaseStartDate	2/5/2026	7/1/2023
tblEnergyUse	LightingElect	0.00	0.35
tblEnergyUse	LightingElect	0.00	0.35
tblFleetMix	HHD	0.02	0.10
tblFleetMix	LDA	0.53	0.57
tblFleetMix	LDT1	0.06	0.06



Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.3100e-003	0.03
tblFleetMix	MCY	0.02	0.03
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.4680e-003	5.8000e-003
tblFleetMix	MHD	0.01	0.03
tblFleetMix	OBUS	6.1600e-004	6.5000e-004
tblFleetMix	SBUS	1.1000e-003	1.1700e-003
tblFleetMix	UBUS	3.1500e-004	3.3000e-004
tblLandUse	LotAcreage	17.67	17.44
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSequestration	NumberOfNewTrees	0.00	302.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblVehicleTrips	CNW_TL	6.90	40.00
tblVehicleTrips	CNW_TTP	41.00	15.70
tblVehicleTrips	CW_TTP	59.00	84.30
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.74	1.40
tblVehicleTrips	SU_TR	1.74	1.40
tblVehicleTrips	WD_TR	1.74	1.40
tblWater	IndoorWaterUseRate	177,986,187.50	3,620,205.00
tblWater	OutdoorWaterUseRate	0.00	3,150,979.00

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	8.6722	92.6863	68.4561	0.1568	15.9706	3.7328	19.7034	4.4483	3.4342	7.8825	0.0000	15,197.3602	15,197.3602	4.8067	0.9963	15,321.9492
2023	95.7624	39.2689	64.4321	0.1838	11.6665	1.4799	13.1464	3.1354	1.3867	4.5220	0.0000	18,528.4870	18,528.4870	1.6578	0.9916	18,865.4395
Maximum	95.7624	92.6863	68.4561	0.1838	15.9706	3.7328	19.7034	4.4483	3.4342	7.8825	0.0000	18,528.4870	18,528.4870	4.8067	0.9963	18,865.4395

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	8.6722	92.6863	68.4561	0.1568	9.8765	3.7328	10.9536	2.6604	3.4342	5.2346	0.0000	15,197.3602	15,197.3602	4.8067	0.9963	15,321.9492
2023	95.7624	39.2689	64.4321	0.1838	11.6665	1.4799	13.1464	3.1354	1.3867	4.5220	0.0000	18,528.4870	18,528.4870	1.6578	0.9916	18,865.4395
Maximum	95.7624	92.6863	68.4561	0.1838	11.6665	3.7328	13.1464	3.1354	3.4342	5.2346	0.0000	18,528.4870	18,528.4870	4.8067	0.9963	18,865.4395



Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	17.6189	1.6000e-003	0.1755	1.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004		0.3762	0.3762	9.9000e-004		0.4008
Energy	0.0457	0.4155	0.3491	2.4900e-003		0.0316	0.0316		0.0316	0.0316		498.6407	498.6407	9.5600e-003	9.1400e-003	501.6038
Mobile	4.6370	18.8562	57.0592	0.1901	17.1004	0.2327	17.3331	4.5909	0.2205	4.8115		19,654.6553	19,654.6553	0.7482	1.6115	20,153.5886
<b>Total</b>	<b>22.3016</b>	<b>19.2733</b>	<b>57.5837</b>	<b>0.1926</b>	<b>17.1004</b>	<b>0.2649</b>	<b>17.3653</b>	<b>4.5909</b>	<b>0.2528</b>	<b>4.8437</b>		<b>20,153.6721</b>	<b>20,153.6721</b>	<b>0.7588</b>	<b>1.6206</b>	<b>20,655.5933</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	17.6189	1.6000e-003	0.1755	1.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004		0.3762	0.3762	9.9000e-004		0.4008
Energy	0.0457	0.4155	0.3491	2.4900e-003		0.0316	0.0316		0.0316	0.0316		498.6407	498.6407	9.5600e-003	9.1400e-003	501.6038
Mobile	4.6370	18.8562	57.0592	0.1901	17.1004	0.2327	17.3331	4.5909	0.2205	4.8115		19,654.6553	19,654.6553	0.7482	1.6115	20,153.5886
<b>Total</b>	<b>22.3016</b>	<b>19.2733</b>	<b>57.5837</b>	<b>0.1926</b>	<b>17.1004</b>	<b>0.2649</b>	<b>17.3653</b>	<b>4.5909</b>	<b>0.2528</b>	<b>4.8437</b>		<b>20,153.6721</b>	<b>20,153.6721</b>	<b>0.7588</b>	<b>1.6206</b>	<b>20,655.5933</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	9/1/2022	10/31/2022	5	43	
2	Building Construction	Building Construction	11/1/2022	7/31/2023	5	195	
3	Paving	Paving	7/1/2023	7/31/2023	5	21	
4	Architectural Coating	Architectural Coating	6/1/2023	7/31/2023	5	43	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 387**

**Acres of Paving: 21.79**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,154,502; Non-Residential Outdoor: 384,834; Striped Parking Area: 56,945 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	8.00	78	0.48
Building Construction	Cranes	1	8.00	231	0.29
Grading	Excavators	2	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	2	8.00	130	0.42

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	8	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	14	35.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	722.00	282.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	144.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Grading - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					15.5666	0.0000	15.5666	4.3408	0.0000	4.3408			0.0000			0.0000
Off-Road	8.5403	92.5045	67.2963	0.1532		3.7296	3.7296		3.4313	3.4313		14,833.17 40	14,833.17 40	4.7974		14,953.10 77
<b>Total</b>	<b>8.5403</b>	<b>92.5045</b>	<b>67.2963</b>	<b>0.1532</b>	<b>15.5666</b>	<b>3.7296</b>	<b>19.2962</b>	<b>4.3408</b>	<b>3.4313</b>	<b>7.7721</b>		<b>14,833.17 40</b>	<b>14,833.17 40</b>	<b>4.7974</b>		<b>14,953.10 77</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1200e-003	0.0891	0.0305	3.6000e-004	0.0128	1.2200e-003	0.0140	3.6900e-003	1.1700e-003	4.8600e-003		38.6312	38.6312	4.0000e-004	5.7300e-003	40.3497
Worker	0.1288	0.0928	1.1292	3.2200e-003	0.3912	1.9500e-003	0.3932	0.1038	1.7900e-003	0.1055		325.5551	325.5551	8.9000e-003	9.1100e-003	328.4918
<b>Total</b>	<b>0.1319</b>	<b>0.1819</b>	<b>1.1598</b>	<b>3.5800e-003</b>	<b>0.4040</b>	<b>3.1700e-003</b>	<b>0.4072</b>	<b>0.1074</b>	<b>2.9600e-003</b>	<b>0.1104</b>		<b>364.1863</b>	<b>364.1863</b>	<b>9.3000e-003</b>	<b>0.0148</b>	<b>368.8415</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Grading - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0710	0.0000	6.0710	1.6929	0.0000	1.6929			0.0000			0.0000
Off-Road	8.5403	92.5045	67.2963	0.1532		3.7296	3.7296		3.4313	3.4313	0.0000	14,833.17 40	14,833.17 40	4.7974		14,953.10 77
<b>Total</b>	<b>8.5403</b>	<b>92.5045</b>	<b>67.2963</b>	<b>0.1532</b>	<b>6.0710</b>	<b>3.7296</b>	<b>9.8006</b>	<b>1.6929</b>	<b>3.4313</b>	<b>5.1242</b>	<b>0.0000</b>	<b>14,833.17 40</b>	<b>14,833.17 40</b>	<b>4.7974</b>		<b>14,953.10 77</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1200e-003	0.0891	0.0305	3.6000e-004	0.0128	1.2200e-003	0.0140	3.6900e-003	1.1700e-003	4.8600e-003		38.6312	38.6312	4.0000e-004	5.7300e-003	40.3497
Worker	0.1288	0.0928	1.1292	3.2200e-003	0.3912	1.9500e-003	0.3932	0.1038	1.7900e-003	0.1055		325.5551	325.5551	8.9000e-003	9.1100e-003	328.4918
<b>Total</b>	<b>0.1319</b>	<b>0.1819</b>	<b>1.1598</b>	<b>3.5800e-003</b>	<b>0.4040</b>	<b>3.1700e-003</b>	<b>0.4072</b>	<b>0.1074</b>	<b>2.9600e-003</b>	<b>0.1104</b>		<b>364.1863</b>	<b>364.1863</b>	<b>9.3000e-003</b>	<b>0.0148</b>	<b>368.8415</b>



Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122		2,737.1520	2,737.1520	0.6711		2,753.9288
<b>Total</b>	<b>1.8146</b>	<b>16.7670</b>	<b>17.4392</b>	<b>0.0288</b>		<b>0.8645</b>	<b>0.8645</b>		<b>0.8122</b>	<b>0.8122</b>		<b>2,737.1520</b>	<b>2,737.1520</b>	<b>0.6711</b>		<b>2,753.9288</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4392	12.5629	4.3056	0.0514	1.8063	0.1724	1.9786	0.5201	0.1649	0.6850		5,446.9926	5,446.9926	0.0567	0.8084	5,689.3130
Worker	2.6571	1.9132	23.2942	0.0664	8.0703	0.0402	8.1104	2.1403	0.0370	2.1772		6,715.7370	6,715.7370	0.1836	0.1879	6,776.3164
<b>Total</b>	<b>3.0963</b>	<b>14.4761</b>	<b>27.5998</b>	<b>0.1178</b>	<b>9.8765</b>	<b>0.2125</b>	<b>10.0890</b>	<b>2.6604</b>	<b>0.2019</b>	<b>2.8622</b>		<b>12,162.7296</b>	<b>12,162.7296</b>	<b>0.2403</b>	<b>0.9963</b>	<b>12,465.6294</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Building Construction - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122	0.0000	2,737.1520	2,737.1520	0.6711		2,753.9288
<b>Total</b>	<b>1.8146</b>	<b>16.7670</b>	<b>17.4392</b>	<b>0.0288</b>		<b>0.8645</b>	<b>0.8645</b>		<b>0.8122</b>	<b>0.8122</b>	<b>0.0000</b>	<b>2,737.1520</b>	<b>2,737.1520</b>	<b>0.6711</b>		<b>2,753.9288</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4392	12.5629	4.3056	0.0514	1.8063	0.1724	1.9786	0.5201	0.1649	0.6850		5,446.9926	5,446.9926	0.0567	0.8084	5,689.3130
Worker	2.6571	1.9132	23.2942	0.0664	8.0703	0.0402	8.1104	2.1403	0.0370	2.1772		6,715.7370	6,715.7370	0.1836	0.1879	6,776.3164
<b>Total</b>	<b>3.0963</b>	<b>14.4761</b>	<b>27.5998</b>	<b>0.1178</b>	<b>9.8765</b>	<b>0.2125</b>	<b>10.0890</b>	<b>2.6604</b>	<b>0.2019</b>	<b>2.8622</b>		<b>12,162.7296</b>	<b>12,162.7296</b>	<b>0.2403</b>	<b>0.9963</b>	<b>12,465.6294</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Building Construction - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6735	15.4377	17.3101	0.0288		0.7481	0.7481		0.7029	0.7029		2,738.1535	2,738.1535	0.6670		2,754.8288
<b>Total</b>	<b>1.6735</b>	<b>15.4377</b>	<b>17.3101</b>	<b>0.0288</b>		<b>0.7481</b>	<b>0.7481</b>		<b>0.7029</b>	<b>0.7029</b>		<b>2,738.1535</b>	<b>2,738.1535</b>	<b>0.6670</b>		<b>2,754.8288</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2944	9.7707	3.9212	0.0494	1.8062	0.0805	1.8867	0.5201	0.0770	0.5971		5,237.6085	5,237.6085	0.0522	0.7746	5,469.7499
Worker	2.4709	1.6901	21.4502	0.0643	8.0703	0.0377	8.1080	2.1403	0.0347	2.1750		6,501.0573	6,501.0573	0.1653	0.1734	6,556.8493
<b>Total</b>	<b>2.7652</b>	<b>11.4608</b>	<b>25.3714</b>	<b>0.1137</b>	<b>9.8765</b>	<b>0.1183</b>	<b>9.9947</b>	<b>2.6603</b>	<b>0.1118</b>	<b>2.7721</b>		<b>11,738.6658</b>	<b>11,738.6658</b>	<b>0.2175</b>	<b>0.9480</b>	<b>12,026.5993</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Building Construction - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6735	15.4377	17.3101	0.0288		0.7481	0.7481		0.7029	0.7029	0.0000	2,738.1535	2,738.1535	0.6670		2,754.8288
<b>Total</b>	<b>1.6735</b>	<b>15.4377</b>	<b>17.3101</b>	<b>0.0288</b>		<b>0.7481</b>	<b>0.7481</b>		<b>0.7029</b>	<b>0.7029</b>	<b>0.0000</b>	<b>2,738.1535</b>	<b>2,738.1535</b>	<b>0.6670</b>		<b>2,754.8288</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2944	9.7707	3.9212	0.0494	1.8062	0.0805	1.8867	0.5201	0.0770	0.5971		5,237.6085	5,237.6085	0.0522	0.7746	5,469.7499
Worker	2.4709	1.6901	21.4502	0.0643	8.0703	0.0377	8.1080	2.1403	0.0347	2.1750		6,501.0573	6,501.0573	0.1653	0.1734	6,556.8493
<b>Total</b>	<b>2.7652</b>	<b>11.4608</b>	<b>25.3714</b>	<b>0.1137</b>	<b>9.8765</b>	<b>0.1183</b>	<b>9.9947</b>	<b>2.6603</b>	<b>0.1118</b>	<b>2.7721</b>		<b>11,738.6658</b>	<b>11,738.6658</b>	<b>0.2175</b>	<b>0.9480</b>	<b>12,026.5993</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.4 Paving - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.3880					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.4208</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>		<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0900e-003	0.0693	0.0278	3.5000e-004	0.0128	5.7000e-004	0.0134	3.6900e-003	5.5000e-004	4.2300e-003		37.1462	37.1462	3.7000e-004	5.4900e-003	38.7926
Worker	0.0513	0.0351	0.4456	1.3400e-003	0.1677	7.8000e-004	0.1685	0.0445	7.2000e-004	0.0452		135.0635	135.0635	3.4300e-003	3.6000e-003	136.2226
<b>Total</b>	<b>0.0534</b>	<b>0.1044</b>	<b>0.4735</b>	<b>1.6900e-003</b>	<b>0.1805</b>	<b>1.3500e-003</b>	<b>0.1818</b>	<b>0.0482</b>	<b>1.2700e-003</b>	<b>0.0494</b>		<b>172.2097</b>	<b>172.2097</b>	<b>3.8000e-003</b>	<b>9.0900e-003</b>	<b>175.0152</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.4 Paving - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.3880					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.4208</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>	<b>0.0000</b>	<b>2,207.584 1</b>	<b>2,207.584 1</b>	<b>0.7140</b>		<b>2,225.433 6</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0900e-003	0.0693	0.0278	3.5000e-004	0.0128	5.7000e-004	0.0134	3.6900e-003	5.5000e-004	4.2300e-003		37.1462	37.1462	3.7000e-004	5.4900e-003	38.7926
Worker	0.0513	0.0351	0.4456	1.3400e-003	0.1677	7.8000e-004	0.1685	0.0445	7.2000e-004	0.0452		135.0635	135.0635	3.4300e-003	3.6000e-003	136.2226
<b>Total</b>	<b>0.0534</b>	<b>0.1044</b>	<b>0.4735</b>	<b>1.6900e-003</b>	<b>0.1805</b>	<b>1.3500e-003</b>	<b>0.1818</b>	<b>0.0482</b>	<b>1.2700e-003</b>	<b>0.0494</b>		<b>172.2097</b>	<b>172.2097</b>	<b>3.8000e-003</b>	<b>9.0900e-003</b>	<b>175.0152</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.5 Architectural Coating - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	89.1012					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944		375.2641	375.2641	0.0225		375.8253
<b>Total</b>	<b>89.3567</b>	<b>1.7373</b>	<b>2.4148</b>	<b>3.9600e-003</b>		<b>0.0944</b>	<b>0.0944</b>		<b>0.0944</b>	<b>0.0944</b>		<b>375.2641</b>	<b>375.2641</b>	<b>0.0225</b>		<b>375.8253</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.4928	0.3371	4.2782	0.0128	1.6096	7.5300e-003	1.6171	0.4269	6.9300e-003	0.4338		1,296.6098	1,296.6098	0.0330	0.0346	1,307.7373
<b>Total</b>	<b>0.4928</b>	<b>0.3371</b>	<b>4.2782</b>	<b>0.0128</b>	<b>1.6096</b>	<b>7.5300e-003</b>	<b>1.6171</b>	<b>0.4269</b>	<b>6.9300e-003</b>	<b>0.4338</b>		<b>1,296.6098</b>	<b>1,296.6098</b>	<b>0.0330</b>	<b>0.0346</b>	<b>1,307.7373</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.5 Architectural Coating - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	89.1012					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944	0.0000	375.2641	375.2641	0.0225		375.8253
<b>Total</b>	<b>89.3567</b>	<b>1.7373</b>	<b>2.4148</b>	<b>3.9600e-003</b>		<b>0.0944</b>	<b>0.0944</b>		<b>0.0944</b>	<b>0.0944</b>	<b>0.0000</b>	<b>375.2641</b>	<b>375.2641</b>	<b>0.0225</b>		<b>375.8253</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.4928	0.3371	4.2782	0.0128	1.6096	7.5300e-003	1.6171	0.4269	6.9300e-003	0.4338		1,296.6098	1,296.6098	0.0330	0.0346	1,307.7373
<b>Total</b>	<b>0.4928</b>	<b>0.3371</b>	<b>4.2782</b>	<b>0.0128</b>	<b>1.6096</b>	<b>7.5300e-003</b>	<b>1.6171</b>	<b>0.4269</b>	<b>6.9300e-003</b>	<b>0.4338</b>		<b>1,296.6098</b>	<b>1,296.6098</b>	<b>0.0330</b>	<b>0.0346</b>	<b>1,307.7373</b>



Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.6370	18.8562	57.0592	0.1901	17.1004	0.2327	17.3331	4.5909	0.2205	4.8115		19,654.65 53	19,654.65 53	0.7482	1.6115	20,153.58 86
Unmitigated	4.6370	18.8562	57.0592	0.1901	17.1004	0.2327	17.3331	4.5909	0.2205	4.8115		19,654.65 53	19,654.65 53	0.7482	1.6115	20,153.58 86

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	1,077.54	1,077.54	1,077.54	7,951,847	7,951,847
<b>Total</b>	<b>1,077.54</b>	<b>1,077.54</b>	<b>1,077.54</b>	<b>7,951,847</b>	<b>7,951,847</b>

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	40.00	84.30	0.00	15.70	100	0	0

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Non-Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Unrefrigerated Warehouse-No Rail	0.567150	0.059410	0.183070	0.000000	0.000000	0.026000	0.032500	0.098420	0.000650	0.000330	0.025500	0.001170	0.005800

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0457	0.4155	0.3491	2.4900e-003		0.0316	0.0316		0.0316	0.0316		498.6407	498.6407	9.5600e-003	9.1400e-003	501.6038
NaturalGas Unmitigated	0.0457	0.4155	0.3491	2.4900e-003		0.0316	0.0316		0.0316	0.0316		498.6407	498.6407	9.5600e-003	9.1400e-003	501.6038

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.2 Energy by Land Use - NaturalGas**

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	4238.45	0.0457	0.4155	0.3491	2.4900e-003		0.0316	0.0316		0.0316	0.0316		498.6407	498.6407	9.5600e-003	9.1400e-003	501.6038
<b>Total</b>		<b>0.0457</b>	<b>0.4155</b>	<b>0.3491</b>	<b>2.4900e-003</b>		<b>0.0316</b>	<b>0.0316</b>		<b>0.0316</b>	<b>0.0316</b>		<b>498.6407</b>	<b>498.6407</b>	<b>9.5600e-003</b>	<b>9.1400e-003</b>	<b>501.6038</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.2 Energy by Land Use - NaturalGas**

Mitigated

	NaturalGas s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	4.23845	0.0457	0.4155	0.3491	2.4900e-003		0.0316	0.0316		0.0316	0.0316		498.6407	498.6407	9.5600e-003	9.1400e-003	501.6038
<b>Total</b>		<b>0.0457</b>	<b>0.4155</b>	<b>0.3491</b>	<b>2.4900e-003</b>		<b>0.0316</b>	<b>0.0316</b>		<b>0.0316</b>	<b>0.0316</b>		<b>498.6407</b>	<b>498.6407</b>	<b>9.5600e-003</b>	<b>9.1400e-003</b>	<b>501.6038</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	17.6189	1.6000e-003	0.1755	1.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004		0.3762	0.3762	9.9000e-004		0.4008
Unmitigated	17.6189	1.6000e-003	0.1755	1.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004		0.3762	0.3762	9.9000e-004		0.4008

**6.2 Area by SubCategory**

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0271					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	15.5756					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0163	1.6000e-003	0.1755	1.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004		0.3762	0.3762	9.9000e-004		0.4008
<b>Total</b>	<b>17.6189</b>	<b>1.6000e-003</b>	<b>0.1755</b>	<b>1.0000e-005</b>		<b>6.3000e-004</b>	<b>6.3000e-004</b>		<b>6.3000e-004</b>	<b>6.3000e-004</b>		<b>0.3762</b>	<b>0.3762</b>	<b>9.9000e-004</b>		<b>0.4008</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0271					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	15.5756					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0163	1.6000e-003	0.1755	1.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004		0.3762	0.3762	9.9000e-004		0.4008
<b>Total</b>	<b>17.6189</b>	<b>1.6000e-003</b>	<b>0.1755</b>	<b>1.0000e-005</b>		<b>6.3000e-004</b>	<b>6.3000e-004</b>		<b>6.3000e-004</b>	<b>6.3000e-004</b>		<b>0.3762</b>	<b>0.3762</b>	<b>9.9000e-004</b>		<b>0.4008</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

Use Reclaimed Water

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Duke Warehouse at Patterson Ave and Nance St**

**Riverside-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	769.67	1000sqft	17.44	769,668.00	0
Other Asphalt Surfaces	135.47	1000sqft	3.11	135,472.00	0
Other Non-Asphalt Surfaces	813.62	1000sqft	18.68	813,618.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2023
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	390.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -  
 Land Use - Per Site Plan, includes paved and unpaved offsite improvements.  
 Construction Phase - Per Applicant  
 Off-road Equipment - Per Applicant  
 Off-road Equipment - 8 hours per day  
 Off-road Equipment -  
 Off-road Equipment - 8 hours per day.  
 Grading -  
 Trips and VMT - Two (2) daily water truck trips added to grading and paving activities per Rule 403.  
 Architectural Coating - Per Rule 1113.



Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Vehicle Trips - Per TIA.

Fleet Mix - Per TIA.

Energy Use - Added 0.35 lighting energy intensity to account for parking lot lighting.

Water And Wastewater - Per WSA and RWUE

Sequestration - Per Landscape Plan

Construction Off-road Equipment Mitigation - 3 times per - Rule 403

Water Mitigation - Per RWUE

Waste Mitigation - Per CalRecycle

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblConstructionPhase	NumDays	55.00	43.00
tblConstructionPhase	NumDays	740.00	195.00
tblConstructionPhase	NumDays	75.00	43.00
tblConstructionPhase	NumDays	55.00	21.00
tblConstructionPhase	PhaseEndDate	7/8/2026	7/31/2023
tblConstructionPhase	PhaseEndDate	2/4/2026	7/31/2023
tblConstructionPhase	PhaseEndDate	4/5/2023	10/31/2022
tblConstructionPhase	PhaseEndDate	4/22/2026	7/31/2023
tblConstructionPhase	PhaseStartDate	4/23/2026	6/1/2023
tblConstructionPhase	PhaseStartDate	4/6/2023	11/1/2022
tblConstructionPhase	PhaseStartDate	12/22/2022	9/1/2022
tblConstructionPhase	PhaseStartDate	2/5/2026	7/1/2023
tblEnergyUse	LightingElect	0.00	0.35
tblEnergyUse	LightingElect	0.00	0.35
tblFleetMix	HHD	0.02	0.10
tblFleetMix	LDA	0.53	0.57
tblFleetMix	LDT1	0.06	0.06

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.3100e-003	0.03
tblFleetMix	MCY	0.02	0.03
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.4680e-003	5.8000e-003
tblFleetMix	MHD	0.01	0.03
tblFleetMix	OBUS	6.1600e-004	6.5000e-004
tblFleetMix	SBUS	1.1000e-003	1.1700e-003
tblFleetMix	UBUS	3.1500e-004	3.3000e-004
tblLandUse	LotAcreage	17.67	17.44
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSequestration	NumberOfNewTrees	0.00	302.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblVehicleTrips	CNW_TL	6.90	40.00
tblVehicleTrips	CNW_TTP	41.00	15.70
tblVehicleTrips	CW_TTP	59.00	84.30
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.74	1.40
tblVehicleTrips	SU_TR	1.74	1.40
tblVehicleTrips	WD_TR	1.74	1.40
tblWater	IndoorWaterUseRate	177,986,187.50	3,620,205.00
tblWater	OutdoorWaterUseRate	0.00	3,150,979.00

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**2.0 Emissions Summary**

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.2916	2.6803	2.4899	6.6300e-003	0.5570	0.1039	0.6610	0.1533	0.0961	0.2494	0.0000	596.9989	596.9989	0.1120	0.0202	605.8284
2023	2.2729	2.1794	3.6116	0.0115	0.7695	0.0730	0.8425	0.2074	0.0686	0.2761	0.0000	1,057.2921	1,057.2921	0.0686	0.0658	1,078.6279
Maximum	2.2729	2.6803	3.6116	0.0115	0.7695	0.1039	0.8425	0.2074	0.0961	0.2761	0.0000	1,057.2921	1,057.2921	0.1120	0.0658	1,078.6279

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.2916	2.6803	2.4899	6.6300e-003	0.3529	0.1039	0.4568	0.0963	0.0961	0.1925	0.0000	596.9985	596.9985	0.1120	0.0202	605.8280
2023	2.2729	2.1794	3.6116	0.0115	0.7695	0.0730	0.8425	0.2074	0.0686	0.2761	0.0000	1,057.2918	1,057.2918	0.0686	0.0658	1,078.6276
Maximum	2.2729	2.6803	3.6116	0.0115	0.7695	0.1039	0.8425	0.2074	0.0961	0.2761	0.0000	1,057.2918	1,057.2918	0.1120	0.0658	1,078.6276

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	15.39	0.00	13.58	15.78	0.00	10.83	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2022	11-30-2022	2.5955	2.5955
2	12-1-2022	2-28-2023	1.0606	1.0606
3	3-1-2023	5-31-2023	1.0203	1.0203
4	6-1-2023	8-31-2023	2.8067	2.8067
		Highest	2.8067	2.8067

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.2145	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0427	0.0427	1.1000e-004	0.0000	0.0455
Energy	8.3400e-003	0.0758	0.0637	4.6000e-004		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003	0.0000	458.1400	458.1400	0.0333	5.3600e-003	460.5681
Mobile	0.8527	3.4378	10.7590	0.0350	3.0619	0.0423	3.1042	0.8232	0.0401	0.8633	0.0000	3,280.4598	3,280.4598	0.1238	0.2665	3,362.9702
Waste						0.0000	0.0000		0.0000	0.0000	146.8619	0.0000	146.8619	8.6793	0.0000	363.8442
Water						0.0000	0.0000		0.0000	0.0000	1.1485	14.5682	15.7168	0.1192	2.9300e-003	19.5711
<b>Total</b>	<b>4.0756</b>	<b>3.5138</b>	<b>10.8446</b>	<b>0.0355</b>	<b>3.0619</b>	<b>0.0481</b>	<b>3.1100</b>	<b>0.8232</b>	<b>0.0459</b>	<b>0.8691</b>	<b>148.0105</b>	<b>3,753.2106</b>	<b>3,901.2211</b>	<b>8.9557</b>	<b>0.2748</b>	<b>4,206.9991</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.2145	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0427	0.0427	1.1000e-004	0.0000	0.0455
Energy	8.3400e-003	0.0758	0.0637	4.6000e-004		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003	0.0000	458.1400	458.1400	0.0333	5.3600e-003	460.5681
Mobile	0.8527	3.4378	10.7590	0.0350	3.0619	0.0423	3.1042	0.8232	0.0401	0.8633	0.0000	3,280.4598	3,280.4598	0.1238	0.2665	3,362.9702
Waste						0.0000	0.0000		0.0000	0.0000	92.5230	0.0000	92.5230	5.4680	0.0000	229.2219
Water						0.0000	0.0000		0.0000	0.0000	1.1485	9.5333	10.6819	0.1188	2.8800e-003	14.5102
<b>Total</b>	<b>4.0756</b>	<b>3.5138</b>	<b>10.8446</b>	<b>0.0355</b>	<b>3.0619</b>	<b>0.0481</b>	<b>3.1100</b>	<b>0.8232</b>	<b>0.0459</b>	<b>0.8691</b>	<b>93.6715</b>	<b>3,748.1757</b>	<b>3,841.8473</b>	<b>5.7439</b>	<b>0.2747</b>	<b>4,067.3158</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>36.71</b>	<b>0.13</b>	<b>1.52</b>	<b>35.86</b>	<b>0.02</b>	<b>3.32</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**2.3 Vegetation**

Vegetation

	CO2e
Category	MT
New Trees	213.8160
<b>Total</b>	<b>213.8160</b>

**3.0 Construction Detail**

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	9/1/2022	10/31/2022	5	43	
2	Building Construction	Building Construction	11/1/2022	7/31/2023	5	195	
3	Paving	Paving	7/1/2023	7/31/2023	5	21	
4	Architectural Coating	Architectural Coating	6/1/2023	7/31/2023	5	43	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 387**

**Acres of Paving: 21.79**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,154,502; Non-Residential Outdoor: 384,834; Striped Parking Area: 56,945 (Architectural Coating – sqft)**

OffRoad Equipment

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	8.00	78	0.48
Building Construction	Cranes	1	8.00	231	0.29
Grading	Excavators	2	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	8	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	14	35.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	722.00	282.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	144.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Grading - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3347	0.0000	0.3347	0.0933	0.0000	0.0933	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1836	1.9889	1.4469	3.2900e-003		0.0802	0.0802		0.0738	0.0738	0.0000	289.3132	289.3132	0.0936	0.0000	291.6525
<b>Total</b>	<b>0.1836</b>	<b>1.9889</b>	<b>1.4469</b>	<b>3.2900e-003</b>	<b>0.3347</b>	<b>0.0802</b>	<b>0.4149</b>	<b>0.0933</b>	<b>0.0738</b>	<b>0.1671</b>	<b>0.0000</b>	<b>289.3132</b>	<b>289.3132</b>	<b>0.0936</b>	<b>0.0000</b>	<b>291.6525</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.0000e-005	1.9100e-003	6.4000e-004	1.0000e-005	2.7000e-004	3.0000e-005	3.0000e-004	8.0000e-005	3.0000e-005	1.0000e-004	0.0000	0.7530	0.7530	1.0000e-005	1.1000e-004	0.7865
Worker	2.6300e-003	2.0500e-003	0.0256	7.0000e-005	8.2700e-003	4.0000e-005	8.3100e-003	2.2000e-003	4.0000e-005	2.2300e-003	0.0000	6.4981	6.4981	1.7000e-004	1.8000e-004	6.5564
<b>Total</b>	<b>2.7000e-003</b>	<b>3.9600e-003</b>	<b>0.0262</b>	<b>8.0000e-005</b>	<b>8.5400e-003</b>	<b>7.0000e-005</b>	<b>8.6100e-003</b>	<b>2.2800e-003</b>	<b>7.0000e-005</b>	<b>2.3300e-003</b>	<b>0.0000</b>	<b>7.2511</b>	<b>7.2511</b>	<b>1.8000e-004</b>	<b>2.9000e-004</b>	<b>7.3429</b>



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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Grading - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1305	0.0000	0.1305	0.0364	0.0000	0.0364	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1836	1.9888	1.4469	3.2900e-003		0.0802	0.0802		0.0738	0.0738	0.0000	289.3129	289.3129	0.0936	0.0000	291.6521
<b>Total</b>	<b>0.1836</b>	<b>1.9888</b>	<b>1.4469</b>	<b>3.2900e-003</b>	<b>0.1305</b>	<b>0.0802</b>	<b>0.2107</b>	<b>0.0364</b>	<b>0.0738</b>	<b>0.1102</b>	<b>0.0000</b>	<b>289.3129</b>	<b>289.3129</b>	<b>0.0936</b>	<b>0.0000</b>	<b>291.6521</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.0000e-005	1.9100e-003	6.4000e-004	1.0000e-005	2.7000e-004	3.0000e-005	3.0000e-004	8.0000e-005	3.0000e-005	1.0000e-004	0.0000	0.7530	0.7530	1.0000e-005	1.1000e-004	0.7865
Worker	2.6300e-003	2.0500e-003	0.0256	7.0000e-005	8.2700e-003	4.0000e-005	8.3100e-003	2.2000e-003	4.0000e-005	2.2300e-003	0.0000	6.4981	6.4981	1.7000e-004	1.8000e-004	6.5564
<b>Total</b>	<b>2.7000e-003</b>	<b>3.9600e-003</b>	<b>0.0262</b>	<b>8.0000e-005</b>	<b>8.5400e-003</b>	<b>7.0000e-005</b>	<b>8.6100e-003</b>	<b>2.2800e-003</b>	<b>7.0000e-005</b>	<b>2.3300e-003</b>	<b>0.0000</b>	<b>7.2511</b>	<b>7.2511</b>	<b>1.8000e-004</b>	<b>2.9000e-004</b>	<b>7.3429</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0399	0.3689	0.3837	6.3000e-004		0.0190	0.0190		0.0179	0.0179	0.0000	54.6283	54.6283	0.0134	0.0000	54.9631
<b>Total</b>	<b>0.0399</b>	<b>0.3689</b>	<b>0.3837</b>	<b>6.3000e-004</b>		<b>0.0190</b>	<b>0.0190</b>		<b>0.0179</b>	<b>0.0179</b>	<b>0.0000</b>	<b>54.6283</b>	<b>54.6283</b>	<b>0.0134</b>	<b>0.0000</b>	<b>54.9631</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.8600e-003	0.2754	0.0928	1.1300e-003	0.0392	3.7900e-003	0.0430	0.0113	3.6200e-003	0.0149	0.0000	108.6429	108.6429	1.1400e-003	0.0161	113.4757
Worker	0.0555	0.0432	0.5403	1.5000e-003	0.1746	8.8000e-004	0.1755	0.0464	8.1000e-004	0.0472	0.0000	137.1634	137.1634	3.6800e-003	3.8200e-003	138.3943
<b>Total</b>	<b>0.0654</b>	<b>0.3186</b>	<b>0.6331</b>	<b>2.6300e-003</b>	<b>0.2138</b>	<b>4.6700e-003</b>	<b>0.2185</b>	<b>0.0577</b>	<b>4.4300e-003</b>	<b>0.0621</b>	<b>0.0000</b>	<b>245.8063</b>	<b>245.8063</b>	<b>4.8200e-003</b>	<b>0.0199</b>	<b>251.8700</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Building Construction - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0399	0.3689	0.3837	6.3000e-004		0.0190	0.0190		0.0179	0.0179	0.0000	54.6282	54.6282	0.0134	0.0000	54.9630
<b>Total</b>	<b>0.0399</b>	<b>0.3689</b>	<b>0.3837</b>	<b>6.3000e-004</b>		<b>0.0190</b>	<b>0.0190</b>		<b>0.0179</b>	<b>0.0179</b>	<b>0.0000</b>	<b>54.6282</b>	<b>54.6282</b>	<b>0.0134</b>	<b>0.0000</b>	<b>54.9630</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.8600e-003	0.2754	0.0928	1.1300e-003	0.0392	3.7900e-003	0.0430	0.0113	3.6200e-003	0.0149	0.0000	108.6429	108.6429	1.1400e-003	0.0161	113.4757
Worker	0.0555	0.0432	0.5403	1.5000e-003	0.1746	8.8000e-004	0.1755	0.0464	8.1000e-004	0.0472	0.0000	137.1634	137.1634	3.6800e-003	3.8200e-003	138.3943
<b>Total</b>	<b>0.0654</b>	<b>0.3186</b>	<b>0.6331</b>	<b>2.6300e-003</b>	<b>0.2138</b>	<b>4.6700e-003</b>	<b>0.2185</b>	<b>0.0577</b>	<b>4.4300e-003</b>	<b>0.0621</b>	<b>0.0000</b>	<b>245.8063</b>	<b>245.8063</b>	<b>4.8200e-003</b>	<b>0.0199</b>	<b>251.8700</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Building Construction - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1264	1.1656	1.3069	2.1800e-003		0.0565	0.0565		0.0531	0.0531	0.0000	187.5428	187.5428	0.0457	0.0000	188.6850
<b>Total</b>	<b>0.1264</b>	<b>1.1656</b>	<b>1.3069</b>	<b>2.1800e-003</b>		<b>0.0565</b>	<b>0.0565</b>		<b>0.0531</b>	<b>0.0531</b>	<b>0.0000</b>	<b>187.5428</b>	<b>187.5428</b>	<b>0.0457</b>	<b>0.0000</b>	<b>188.6850</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0231	0.7300	0.2908	3.7200e-003	0.1345	6.0700e-003	0.1406	0.0388	5.8000e-003	0.0446	0.0000	358.2221	358.2221	3.6200e-003	0.0530	374.0974
Worker	0.1768	0.1310	1.7067	4.9700e-003	0.5992	2.8500e-003	0.6020	0.1591	2.6200e-003	0.1617	0.0000	455.6318	455.6318	0.0114	0.0121	459.5214
<b>Total</b>	<b>0.1999</b>	<b>0.8610</b>	<b>1.9975</b>	<b>8.6900e-003</b>	<b>0.7337</b>	<b>8.9200e-003</b>	<b>0.7426</b>	<b>0.1979</b>	<b>8.4200e-003</b>	<b>0.2063</b>	<b>0.0000</b>	<b>813.8539</b>	<b>813.8539</b>	<b>0.0150</b>	<b>0.0651</b>	<b>833.6188</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Building Construction - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1264	1.1656	1.3069	2.1800e-003		0.0565	0.0565		0.0531	0.0531	0.0000	187.5426	187.5426	0.0457	0.0000	188.6848
<b>Total</b>	<b>0.1264</b>	<b>1.1656</b>	<b>1.3069</b>	<b>2.1800e-003</b>		<b>0.0565</b>	<b>0.0565</b>		<b>0.0531</b>	<b>0.0531</b>	<b>0.0000</b>	<b>187.5426</b>	<b>187.5426</b>	<b>0.0457</b>	<b>0.0000</b>	<b>188.6848</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0231	0.7300	0.2908	3.7200e-003	0.1345	6.0700e-003	0.1406	0.0388	5.8000e-003	0.0446	0.0000	358.2221	358.2221	3.6200e-003	0.0530	374.0974
Worker	0.1768	0.1310	1.7067	4.9700e-003	0.5992	2.8500e-003	0.6020	0.1591	2.6200e-003	0.1617	0.0000	455.6318	455.6318	0.0114	0.0121	459.5214
<b>Total</b>	<b>0.1999</b>	<b>0.8610</b>	<b>1.9975</b>	<b>8.6900e-003</b>	<b>0.7337</b>	<b>8.9200e-003</b>	<b>0.7426</b>	<b>0.1979</b>	<b>8.4200e-003</b>	<b>0.2063</b>	<b>0.0000</b>	<b>813.8539</b>	<b>813.8539</b>	<b>0.0150</b>	<b>0.0651</b>	<b>833.6188</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.4 Paving - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0108	0.1070	0.1531	2.4000e-004		5.3600e-003	5.3600e-003		4.9300e-003	4.9300e-003	0.0000	21.0282	21.0282	6.8000e-003	0.0000	21.1982
Paving	4.0700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0149</b>	<b>0.1070</b>	<b>0.1531</b>	<b>2.4000e-004</b>		<b>5.3600e-003</b>	<b>5.3600e-003</b>		<b>4.9300e-003</b>	<b>4.9300e-003</b>	<b>0.0000</b>	<b>21.0282</b>	<b>21.0282</b>	<b>6.8000e-003</b>	<b>0.0000</b>	<b>21.1982</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-005	7.2000e-004	2.9000e-004	0.0000	1.3000e-004	1.0000e-005	1.4000e-004	4.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3533	0.3533	0.0000	5.0000e-005	0.3690
Worker	5.1000e-004	3.8000e-004	4.9300e-003	1.0000e-005	1.7300e-003	1.0000e-005	1.7400e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.3165	1.3165	3.0000e-005	3.0000e-005	1.3277
<b>Total</b>	<b>5.3000e-004</b>	<b>1.1000e-003</b>	<b>5.2200e-003</b>	<b>1.0000e-005</b>	<b>1.8600e-003</b>	<b>2.0000e-005</b>	<b>1.8800e-003</b>	<b>5.0000e-004</b>	<b>2.0000e-005</b>	<b>5.1000e-004</b>	<b>0.0000</b>	<b>1.6698</b>	<b>1.6698</b>	<b>3.0000e-005</b>	<b>8.0000e-005</b>	<b>1.6967</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.4 Paving - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0108	0.1070	0.1531	2.4000e-004		5.3600e-003	5.3600e-003		4.9300e-003	4.9300e-003	0.0000	21.0282	21.0282	6.8000e-003	0.0000	21.1982
Paving	4.0700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0149</b>	<b>0.1070</b>	<b>0.1531</b>	<b>2.4000e-004</b>		<b>5.3600e-003</b>	<b>5.3600e-003</b>		<b>4.9300e-003</b>	<b>4.9300e-003</b>	<b>0.0000</b>	<b>21.0282</b>	<b>21.0282</b>	<b>6.8000e-003</b>	<b>0.0000</b>	<b>21.1982</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-005	7.2000e-004	2.9000e-004	0.0000	1.3000e-004	1.0000e-005	1.4000e-004	4.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3533	0.3533	0.0000	5.0000e-005	0.3690
Worker	5.1000e-004	3.8000e-004	4.9300e-003	1.0000e-005	1.7300e-003	1.0000e-005	1.7400e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.3165	1.3165	3.0000e-005	3.0000e-005	1.3277
<b>Total</b>	<b>5.3000e-004</b>	<b>1.1000e-003</b>	<b>5.2200e-003</b>	<b>1.0000e-005</b>	<b>1.8600e-003</b>	<b>2.0000e-005</b>	<b>1.8800e-003</b>	<b>5.0000e-004</b>	<b>2.0000e-005</b>	<b>5.1000e-004</b>	<b>0.0000</b>	<b>1.6698</b>	<b>1.6698</b>	<b>3.0000e-005</b>	<b>8.0000e-005</b>	<b>1.6967</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.5 Architectural Coating - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.9157					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4900e-003	0.0374	0.0519	9.0000e-005		2.0300e-003	2.0300e-003		2.0300e-003	2.0300e-003	0.0000	7.3193	7.3193	4.4000e-004	0.0000	7.3303
<b>Total</b>	<b>1.9212</b>	<b>0.0374</b>	<b>0.0519</b>	<b>9.0000e-005</b>		<b>2.0300e-003</b>	<b>2.0300e-003</b>		<b>2.0300e-003</b>	<b>2.0300e-003</b>	<b>0.0000</b>	<b>7.3193</b>	<b>7.3193</b>	<b>4.4000e-004</b>	<b>0.0000</b>	<b>7.3303</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0100	7.4400e-003	0.0969	2.8000e-004	0.0340	1.6000e-004	0.0342	9.0400e-003	1.5000e-004	9.1900e-003	0.0000	25.8780	25.8780	6.5000e-004	6.9000e-004	26.0989
<b>Total</b>	<b>0.0100</b>	<b>7.4400e-003</b>	<b>0.0969</b>	<b>2.8000e-004</b>	<b>0.0340</b>	<b>1.6000e-004</b>	<b>0.0342</b>	<b>9.0400e-003</b>	<b>1.5000e-004</b>	<b>9.1900e-003</b>	<b>0.0000</b>	<b>25.8780</b>	<b>25.8780</b>	<b>6.5000e-004</b>	<b>6.9000e-004</b>	<b>26.0989</b>



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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.5 Architectural Coating - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.9157					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4900e-003	0.0374	0.0519	9.0000e-005		2.0300e-003	2.0300e-003		2.0300e-003	2.0300e-003	0.0000	7.3193	7.3193	4.4000e-004	0.0000	7.3303
<b>Total</b>	<b>1.9212</b>	<b>0.0374</b>	<b>0.0519</b>	<b>9.0000e-005</b>		<b>2.0300e-003</b>	<b>2.0300e-003</b>		<b>2.0300e-003</b>	<b>2.0300e-003</b>	<b>0.0000</b>	<b>7.3193</b>	<b>7.3193</b>	<b>4.4000e-004</b>	<b>0.0000</b>	<b>7.3303</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0100	7.4400e-003	0.0969	2.8000e-004	0.0340	1.6000e-004	0.0342	9.0400e-003	1.5000e-004	9.1900e-003	0.0000	25.8780	25.8780	6.5000e-004	6.9000e-004	26.0989
<b>Total</b>	<b>0.0100</b>	<b>7.4400e-003</b>	<b>0.0969</b>	<b>2.8000e-004</b>	<b>0.0340</b>	<b>1.6000e-004</b>	<b>0.0342</b>	<b>9.0400e-003</b>	<b>1.5000e-004</b>	<b>9.1900e-003</b>	<b>0.0000</b>	<b>25.8780</b>	<b>25.8780</b>	<b>6.5000e-004</b>	<b>6.9000e-004</b>	<b>26.0989</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.8527	3.4378	10.7590	0.0350	3.0619	0.0423	3.1042	0.8232	0.0401	0.8633	0.0000	3,280.4598	3,280.4598	0.1238	0.2665	3,362.9702
Unmitigated	0.8527	3.4378	10.7590	0.0350	3.0619	0.0423	3.1042	0.8232	0.0401	0.8633	0.0000	3,280.4598	3,280.4598	0.1238	0.2665	3,362.9702

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	1,077.54	1,077.54	1,077.54	7,951,847	7,951,847
<b>Total</b>	<b>1,077.54</b>	<b>1,077.54</b>	<b>1,077.54</b>	<b>7,951,847</b>	<b>7,951,847</b>

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	40.00	84.30	0.00	15.70	100	0	0

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Non-Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Unrefrigerated Warehouse-No Rail	0.567150	0.059410	0.183070	0.000000	0.000000	0.026000	0.032500	0.098420	0.000650	0.000330	0.025500	0.001170	0.005800

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	375.5844	375.5844	0.0317	3.8400e-003	377.5220
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	375.5844	375.5844	0.0317	3.8400e-003	377.5220
NaturalGas Mitigated	8.3400e-003	0.0758	0.0637	4.6000e-004		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003	0.0000	82.5556	82.5556	1.5800e-003	1.5100e-003	83.0461
NaturalGas Unmitigated	8.3400e-003	0.0758	0.0637	4.6000e-004		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003	0.0000	82.5556	82.5556	1.5800e-003	1.5100e-003	83.0461

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.2 Energy by Land Use - Natural Gas**

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1.54703e+006	8.3400e-003	0.0758	0.0637	4.6000e-004		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003	0.0000	82.5556	82.5556	1.5800e-003	1.5100e-003	83.0461
<b>Total</b>		<b>8.3400e-003</b>	<b>0.0758</b>	<b>0.0637</b>	<b>4.6000e-004</b>		<b>5.7600e-003</b>	<b>5.7600e-003</b>		<b>5.7600e-003</b>	<b>5.7600e-003</b>	<b>0.0000</b>	<b>82.5556</b>	<b>82.5556</b>	<b>1.5800e-003</b>	<b>1.5100e-003</b>	<b>83.0461</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.2 Energy by Land Use - Natural Gas**

**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1.54703e+006	8.3400e-003	0.0758	0.0637	4.6000e-004		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003	0.0000	82.5556	82.5556	1.5800e-003	1.5100e-003	83.0461
<b>Total</b>		<b>8.3400e-003</b>	<b>0.0758</b>	<b>0.0637</b>	<b>4.6000e-004</b>		<b>5.7600e-003</b>	<b>5.7600e-003</b>		<b>5.7600e-003</b>	<b>5.7600e-003</b>	<b>0.0000</b>	<b>82.5556</b>	<b>82.5556</b>	<b>1.5800e-003</b>	<b>1.5100e-003</b>	<b>83.0461</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.3 Energy by Land Use - Electricity**

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	47415.2	8.4089	7.1000e-004	9.0000e-005	8.4523
Other Non-Asphalt Surfaces	284766	50.5020	4.2600e-003	5.2000e-004	50.7626
Unrefrigerated Warehouse-No Rail	1.78563e+006	316.6735	0.0267	3.2400e-003	318.3072
<b>Total</b>		<b>375.5844</b>	<b>0.0317</b>	<b>3.8500e-003</b>	<b>377.5220</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.3 Energy by Land Use - Electricity**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	47415.2	8.4089	7.1000e-004	9.0000e-005	8.4523
Other Non-Asphalt Surfaces	284766	50.5020	4.2600e-003	5.2000e-004	50.7626
Unrefrigerated Warehouse-No Rail	1.78563e+006	316.6735	0.0267	3.2400e-003	318.3072
<b>Total</b>		<b>375.5844</b>	<b>0.0317</b>	<b>3.8500e-003</b>	<b>377.5220</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.2145	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0427	0.0427	1.1000e-004	0.0000	0.0455
Unmitigated	3.2145	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0427	0.0427	1.1000e-004	0.0000	0.0455

**6.2 Area by SubCategory**

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.3699					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.8426					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0300e-003	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0427	0.0427	1.1000e-004	0.0000	0.0455
<b>Total</b>	<b>3.2145</b>	<b>2.0000e-004</b>	<b>0.0219</b>	<b>0.0000</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>0.0427</b>	<b>0.0427</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>0.0455</b>



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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.3699					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.8426					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0300e-003	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0427	0.0427	1.1000e-004	0.0000	0.0455
<b>Total</b>	<b>3.2145</b>	<b>2.0000e-004</b>	<b>0.0219</b>	<b>0.0000</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>0.0427</b>	<b>0.0427</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>0.0455</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

Use Reclaimed Water

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	10.6819	0.1188	2.8800e-003	14.5102
Unmitigated	15.7168	0.1192	2.9300e-003	19.5711

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	3.6202 / 3.15098	15.7168	0.1192	2.9300e-003	19.5711
<b>Total</b>		<b>15.7168</b>	<b>0.1192</b>	<b>2.9300e-003</b>	<b>19.5711</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**7.2 Water by Land Use**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	3.6202 / 0.595595	10.6819	0.1188	2.8800e-003	14.5102
<b>Total</b>		<b>10.6819</b>	<b>0.1188</b>	<b>2.8800e-003</b>	<b>14.5102</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	92.5230	5.4680	0.0000	229.2219
Unmitigated	146.8619	8.6793	0.0000	363.8442

**8.2 Waste by Land Use**

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	723.49	146.8619	8.6793	0.0000	363.8442
<b>Total</b>		<b>146.8619</b>	<b>8.6793</b>	<b>0.0000</b>	<b>363.8442</b>

Duke Warehouse at Patterson Ave and Nance St - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**8.2 Waste by Land Use**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	455.799	92.5230	5.4680	0.0000	229.2219
<b>Total</b>		<b>92.5230</b>	<b>5.4680</b>	<b>0.0000</b>	<b>229.2219</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**11.0 Vegetation**

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	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	213.8160	0.0000	0.0000	213.8160

**11.2 Net New Trees**

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	302	213.8160	0.0000	0.0000	213.8160
<b>Total</b>		<b>213.8160</b>	<b>0.0000</b>	<b>0.0000</b>	<b>213.8160</b>

CalEEMod Outputs for Operational LST  
and  
Particulate Matter Idling Calculations

Duke Warehouse at Patterson and Nance Operational LST - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Duke Warehouse at Patterson and Nance Operational LST  
Riverside-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	769.67	1000sqft	17.44	769,668.00	0
Other Asphalt Surfaces	1.61	Acre	1.61	70,131.60	0
Other Non-Asphalt Surfaces	18.86	Acre	18.86	821,541.60	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2023
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	390.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use - Per Site Plan, includes paved and unpaved offsite improvements.
- Construction Phase - Construction Not Modeled
- Off-road Equipment - 8 hours per day.
- Off-road Equipment - Construction Not Modeled
- Trips and VMT - Construction Not Modeled
- Grading -
- Architectural Coating - Per Rule 1113.
- Vehicle Trips - Model onsite truck travel
- Energy Use - Added 0.35 lighting energy intensity to account for parking lot lighting.
- Water And Wastewater - Per WSA and Landscape Architect.
- Land Use Change -



Duke Warehouse at Patterson and Nance Operational LST - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Sequestration -

Construction Off-road Equipment Mitigation - Per Rule 403

Waste Mitigation - Per CalRecycle

Fleet Mix - Per TIA.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	75.00	0.00
tblEnergyUse	LightingElect	0.00	0.35
tblEnergyUse	LightingElect	0.00	0.35
tblFleetMix	HHD	0.02	0.63
tblFleetMix	LDA	0.53	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.3100e-003	0.17
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.4680e-003	0.00
tblFleetMix	MHD	0.01	0.21
tblFleetMix	OBUS	6.1600e-004	0.00
tblFleetMix	SBUS	1.1000e-003	0.00
tblFleetMix	UBUS	3.1500e-004	0.00
tblGrading	AcresOfGrading	0.00	387.00

Duke Warehouse at Patterson and Nance Operational LST - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblLandUse	LandUseSquareFeet	769,670.00	769,668.00
tblLandUse	LotAcreage	17.67	17.44
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblSequestration	NumberOfNewTrees	0.00	282.00
tblVehicleTrips	CNW_TL	6.90	0.97
tblVehicleTrips	CNW_TTP	41.00	100.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.74	0.22
tblVehicleTrips	SU_TR	1.74	0.22
tblVehicleTrips	WD_TR	1.74	0.22
tblWater	IndoorWaterUseRate	177,986,187.50	1,699,590.00
tblWater	OutdoorWaterUseRate	0.00	5,071,594.00



Duke Warehouse at Patterson and Nance Operational LST - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day											lb/day					
Mitigated	0.1690	2.8204	2.1612	6.7700e-003	0.1472	8.3400e-003	0.1555	0.0415	7.9700e-003	0.0495		718.3006	718.3006	0.0126	0.1101	751.4355
Unmitigated	0.1690	2.8204	2.1612	6.7700e-003	0.1472	8.3400e-003	0.1555	0.0415	7.9700e-003	0.0495		718.3006	718.3006	0.0126	0.1101	751.4355

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	169.33	169.33	169.33	59,786	59,786
<b>Total</b>	<b>169.33</b>	<b>169.33</b>	<b>169.33</b>	<b>59,786</b>	<b>59,786</b>

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	16.60	8.40	0.97	0.00	0.00	100.00	100	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Non-Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.165700	0.207100	0.627200	0.000000	0.000000	0.000000	0.000000	0.000000

Duke Warehouse at Patterson and Nance Operational LST - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Duke Warehouse at Patterson and Nance Operational LST  
Riverside-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	769.67	1000sqft	17.44	769,668.00	0
Other Asphalt Surfaces	1.61	Acre	1.61	70,131.60	0
Other Non-Asphalt Surfaces	18.86	Acre	18.86	821,541.60	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2023
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	390.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use - Per Site Plan, includes paved and unpaved offsite improvements.
- Construction Phase - Construction Not Modeled
- Off-road Equipment - 8 hours per day.
- Off-road Equipment - Construction Not Modeled
- Trips and VMT - Construction Not Modeled
- Grading -
- Architectural Coating - Per Rule 1113.
- Vehicle Trips - Model onsite truck travel
- Energy Use - Added 0.35 lighting energy intensity to account for parking lot lighting.
- Water And Wastewater - Per WSA and Landscape Architect.
- Land Use Change -
- Sequestration -
- Construction Off-road Equipment Mitigation - Per Rule 403

Duke Warehouse at Patterson and Nance Operational LST - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Waste Mitigation - Per CalRecycle

Fleet Mix - Per TIA.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	75.00	0.00
tblEnergyUse	LightingElect	0.00	0.35
tblEnergyUse	LightingElect	0.00	0.35
tblFleetMix	HHD	0.02	0.63
tblFleetMix	LDA	0.53	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.3100e-003	0.17
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.4680e-003	0.00
tblFleetMix	MHD	0.01	0.21
tblFleetMix	OBUS	6.1600e-004	0.00
tblFleetMix	SBUS	1.1000e-003	0.00
tblFleetMix	UBUS	3.1500e-004	0.00
tblGrading	AcresOfGrading	0.00	387.00
tblLandUse	LandUseSquareFeet	769,670.00	769,668.00
tblLandUse	LotAcreage	17.67	17.44
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblSequestration	NumberOfNewTrees	0.00	282.00
tblVehicleTrips	CNW_TL	6.90	0.97
tblVehicleTrips	CNW_TTP	41.00	100.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.74	0.22
tblVehicleTrips	SU_TR	1.74	0.22
tblVehicleTrips	WD_TR	1.74	0.22
tblWater	IndoorWaterUseRate	177,986,187.50	1,699,590.00
tblWater	OutdoorWaterUseRate	0.00	5,071,594.00







Duke Warehouse at Patterson and Nance Operational LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Mitigated	0.1503	3.0354	2.2379	6.8600e-003	0.1472	8.5300e-003	0.1557	0.0415	8.1600e-003	0.0496		728.0600	728.0600	0.0118	0.1117	761.6501
Unmitigated	0.1503	3.0354	2.2379	6.8600e-003	0.1472	8.5300e-003	0.1557	0.0415	8.1600e-003	0.0496		728.0600	728.0600	0.0118	0.1117	761.6501

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	169.33	169.33	169.33	59,786	59,786
Total	169.33	169.33	169.33	59,786	59,786

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	16.60	8.40	0.97	0.00	0.00	100.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Non-Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.165700	0.207100	0.627200	0.000000	0.000000	0.000000	0.000000	0.000000

**Particulate Matter Idling Emissions Calculations for Operation LST**

Pollutant	Emission Factor*	Idling Time	Daily Truck Trips**	Idling Emissions	Idling Emissions
	(g/hr-veh)	(min)		(g/day)	(lb/day)
LHDT2					
PM-10	0.027247535	15	28	0.1907327	0.000420496
PM-2.5	0.026068819	15	28	0.1824817	0.000402305
MHDT					
PM-10	0.005326903	15	35	0.0466104	0.000102759
PM-2.5	0.005096464	15	35	0.0445941	9.83136E-05
HHDT					
PM-10	0.024488195	15	106	0.6489372	0.001430669
PM-2.5	0.023428847	15	106	0.6208644	0.001368779
PM-10 Sub-Total					0.001953924
PM-2.5 Sub-Total					0.001869398
CalEEMod Total					
PM-10 Total					0.1876
PM-2.5 Total					0.0815
Operation LST Total					
PM-10 Total					0.19
PM-2.5 Total					0.08

\* Annual idling emission factors from EMFAC2017 for 2023 in Riverside County

\*\* *Patterson-Nance Warehouse Project Traffic Impact Analysis (DPR 21-00005)* , January 2022

# EV Charging Stations

## Electricity and GHG Emissions Calculations

Duke Warehouse at Patterson and Nance

EV Charging Station Electricity Consumption

	KWh per Day*	Proposed Charging Stations**	Annual Project Total KWh	Annual Project Total MWh
EV Charging Stations	450	24	3,942,000	3,942.00
Total			3,942,000	3,942.00

\* Per SCAQMD assuming a 50 kW charger. *Final Staff Report for Proposed Rule 2305 and Proposed Rule 316*, May 2021

\*\* One charging station plug assumed per EV charging space designated on *Development Plan Review No. 21-00005*, March 2022.

EV Charging Station GHG Emissions

SCE 2021 Intensity Factors	(lbs/MWh)	Project GHG (lbs)	Project GHG (MT)
CO <sub>2</sub> E	393	1,549,206.00	
Total			702.71

Per CalEEMod 2021 User's Guide, Appendix D

# Forklift and Yard Truck Electricity and GHG Emissions Calculations

Pallet Jack/Forklift Estimats

Bldg Size (SF)	Forklifts/TSF*	Total Forklifts
769,668.00	0.12	92.36

Per SCAQMD 'HIGH'CUBE'WAREHOUSE'TRUCK'TRIP'STUDY'  
 WHITE'PAPER'SUMMARY'OF'BUSINESS'SURVEY'RESULTS'  
 June,'2014

Annual Forklift Energy Consumption

Avg KWh/Yr*	Forklifts	Project Total KWh	Project Total MWh
19,446	92.36	1,796,035.67	1,796

Per Electric Power Research Institute, Electric Forklifts, April 2015

\* Typical uses ranges between 12,960 and 25,932 kWh/yr

Annual Forklift GHG Emissions

SCE Intensity Factors (lbs/MWh)	Project GHG (lbs)	Project GHG (MT)
CO2E	393	705,842.02

CalEEMod User Guide Appendix D, Per SCE 2021

Yard Truck (Hostler) Estimats

Bldg Size (SF)	Hostlers/MSF*	Total Hostlers
769,668.00	3.60	2.77

\*Per SCAQMD 'HIGH'CUBE'WAREHOUSE'TRUCK'TRIP'STUDY'  
 WHITE'PAPER'SUMMARY'OF'BUSINESS'SURVEY'RESULTS'  
 June,'2014

Annual Electric Hostler Energy Consumption

Avg KWh/day*	Hostlers	Project Total KWh	Project Total MWh
84.00	2.77	84,952.88	85

\* Per Final Environmental Assessment, PR 2305 (Warehouse ISR), April 2021

Annual Yard Truck GHG Emissions

SCE Intensity Factors (lbs/MWh)	Project GHG (lbs)	Project GHG (MT)
CO2E	393	33,386.48

CalEEMod User Guide Appendix D, Per SCE 2021

# CalEEMod Outputs for VOC Mitigation

Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Duke Warehouse at Patterson Ave and Nance St VOC Mit.  
Riverside-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	769.67	1000sqft	17.44	769,668.00	0
Other Asphalt Surfaces	135.47	1000sqft	3.11	135,472.00	0
Other Non-Asphalt Surfaces	813.62	1000sqft	18.68	813,618.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10	<b>Operational Year</b>	2023		
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	390.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -  
 Land Use - Per Site Plan, includes paved and unpaved offsite improvements.  
 Construction Phase - Per Applicant  
 Off-road Equipment - 8 hours per day.  
 Off-road Equipment - 8 hours per day  
 Off-road Equipment - Per Applicant  
 Off-road Equipment -  
 Trips and VMT - Two (2) daily water truck trips added to grading and paving activities per Rule 403.  
 Grading -  
 Architectural Coating - VOC mitigation 10g/L.  
 Vehicle Trips - Per TIA.



Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Energy Use - Added 0.35 lighting energy intensity to account for parking lot lighting.

Water And Wastewater - Per WSA and RWUE

Sequestration - Per Landscape Plan

Construction Off-road Equipment Mitigation - 3 times per - Rule 403

Water Mitigation - Per RWUE

Waste Mitigation - Per CalRecycle

Fleet Mix - Per TIA.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstructionPhase	NumDays	55.00	43.00
tblConstructionPhase	NumDays	740.00	195.00
tblConstructionPhase	NumDays	75.00	43.00
tblConstructionPhase	NumDays	55.00	21.00
tblEnergyUse	LightingElect	0.00	0.35
tblEnergyUse	LightingElect	0.00	0.35
tblFleetMix	HHD	0.02	0.10
tblFleetMix	LDA	0.53	0.57
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.3100e-003	0.03
tblFleetMix	MCY	0.02	0.03
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.4680e-003	5.8000e-003
tblFleetMix	MHD	0.01	0.03
tblFleetMix	OBUS	6.1600e-004	6.5000e-004
tblFleetMix	SBUS	1.1000e-003	1.1700e-003
tblFleetMix	UBUS	3.1500e-004	3.3000e-004
tblLandUse	LandUseSquareFeet	769,670.00	769,668.00

## Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblLandUse	LandUseSquareFeet	135,470.00	135,472.00
tblLandUse	LandUseSquareFeet	813,620.00	813,618.00
tblLandUse	LotAcreage	17.67	17.44
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSequestration	NumberOfNewTrees	0.00	302.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblVehicleTrips	CNW_TL	6.90	40.00
tblVehicleTrips	CNW_TTP	41.00	15.70
tblVehicleTrips	CW_TTP	59.00	84.30
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.74	1.40
tblVehicleTrips	SU_TR	1.74	1.40
tblVehicleTrips	WD_TR	1.74	1.40
tblWater	IndoorWaterUseRate	177,986,187.50	3,620,205.00
tblWater	OutdoorWaterUseRate	0.00	3,150,979.00



Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	9/1/2022	10/31/2022	5	43	
2	Building Construction	Building Construction	11/1/2022	7/31/2023	5	195	
3	Architectural Coating	Architectural Coating	6/1/2023	7/31/2023	5	43	
4	Paving	Paving	7/1/2023	7/31/2023	5	21	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 387**

**Acres of Paving: 21.79**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,154,502; Non-Residential Outdoor: 384,834; Striped Parking Area: 56,945**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	8	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	8.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	14	35.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	722.00	282.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	144.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

**3.2 Grading - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					15.5666	0.0000	15.5666	4.3408	0.0000	4.3408			0.0000			0.0000
Off-Road	8.5403	92.5045	67.2963	0.1532		3.7296	3.7296		3.4313	3.4313		14,833.1740	14,833.1740	4.7974		14,953.1077
<b>Total</b>	<b>8.5403</b>	<b>92.5045</b>	<b>67.2963</b>	<b>0.1532</b>	<b>15.5666</b>	<b>3.7296</b>	<b>19.2962</b>	<b>4.3408</b>	<b>3.4313</b>	<b>7.7721</b>		<b>14,833.1740</b>	<b>14,833.1740</b>	<b>4.7974</b>		<b>14,953.1077</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.2500e-003	0.0846	0.0294	3.6000e-004	0.0128	1.2200e-003	0.0140	3.6900e-003	1.1700e-003	4.8600e-003		38.5891	38.5891	4.1000e-004	5.7200e-003	40.3046
Worker	0.1379	0.0894	1.3934	3.5600e-003	0.3912	1.9500e-003	0.3932	0.1038	1.7900e-003	0.1055		359.4129	359.4129	8.9600e-003	8.9000e-003	362.2882
<b>Total</b>	<b>0.1411</b>	<b>0.1739</b>	<b>1.4228</b>	<b>3.9200e-003</b>	<b>0.4040</b>	<b>3.1700e-003</b>	<b>0.4072</b>	<b>0.1074</b>	<b>2.9600e-003</b>	<b>0.1104</b>		<b>398.0020</b>	<b>398.0020</b>	<b>9.3700e-003</b>	<b>0.0146</b>	<b>402.5928</b>

Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0710	0.0000	6.0710	1.6929	0.0000	1.6929			0.0000			0.0000
Off-Road	8.5403	92.5045	67.2963	0.1532		3.7296	3.7296		3.4313	3.4313	0.0000	14,833.174 0	14,833.174 0	4.7974		14,953.107 7
<b>Total</b>	<b>8.5403</b>	<b>92.5045</b>	<b>67.2963</b>	<b>0.1532</b>	<b>6.0710</b>	<b>3.7296</b>	<b>9.8006</b>	<b>1.6929</b>	<b>3.4313</b>	<b>5.1242</b>	<b>0.0000</b>	<b>14,833.174 0</b>	<b>14,833.174 0</b>	<b>4.7974</b>		<b>14,953.107 7</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.2500e-003	0.0846	0.0294	3.6000e-004	0.0128	1.2200e-003	0.0140	3.6900e-003	1.1700e-003	4.8600e-003		38.5891	38.5891	4.1000e-004	5.7200e-003	40.3046
Worker	0.1379	0.0894	1.3934	3.5600e-003	0.3912	1.9500e-003	0.3932	0.1038	1.7900e-003	0.1055		359.4129	359.4129	8.9600e-003	8.9000e-003	362.2882
<b>Total</b>	<b>0.1411</b>	<b>0.1739</b>	<b>1.4228</b>	<b>3.9200e-003</b>	<b>0.4040</b>	<b>3.1700e-003</b>	<b>0.4072</b>	<b>0.1074</b>	<b>2.9600e-003</b>	<b>0.1104</b>		<b>398.0020</b>	<b>398.0020</b>	<b>9.3700e-003</b>	<b>0.0146</b>	<b>402.5928</b>

Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122		2,737.1520	2,737.1520	0.6711		2,753.9288
<b>Total</b>	<b>1.8146</b>	<b>16.7670</b>	<b>17.4392</b>	<b>0.0288</b>		<b>0.8645</b>	<b>0.8645</b>		<b>0.8122</b>	<b>0.8122</b>		<b>2,737.1520</b>	<b>2,737.1520</b>	<b>0.6711</b>		<b>2,753.9288</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4589	11.9247	4.1463	0.0513	1.8063	0.1719	1.9782	0.5201	0.1645	0.6846		5,441.0585	5,441.0585	0.0576	0.8069	5,682.9499
Worker	2.8444	1.8432	28.7428	0.0734	8.0703	0.0402	8.1104	2.1403	0.0370	2.1772		7,414.1746	7,414.1746	0.1848	0.1835	7,473.4886
<b>Total</b>	<b>3.3033</b>	<b>13.7678</b>	<b>32.8891</b>	<b>0.1247</b>	<b>9.8765</b>	<b>0.2121</b>	<b>10.0886</b>	<b>2.6604</b>	<b>0.2015</b>	<b>2.8618</b>		<b>12,855.2331</b>	<b>12,855.2331</b>	<b>0.2424</b>	<b>0.9904</b>	<b>13,156.4385</b>

Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122	0.0000	2,737.1520	2,737.1520	0.6711		2,753.9288
<b>Total</b>	<b>1.8146</b>	<b>16.7670</b>	<b>17.4392</b>	<b>0.0288</b>		<b>0.8645</b>	<b>0.8645</b>		<b>0.8122</b>	<b>0.8122</b>	<b>0.0000</b>	<b>2,737.1520</b>	<b>2,737.1520</b>	<b>0.6711</b>		<b>2,753.9288</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4589	11.9247	4.1463	0.0513	1.8063	0.1719	1.9782	0.5201	0.1645	0.6846		5,441.0585	5,441.0585	0.0576	0.8069	5,682.9499
Worker	2.8444	1.8432	28.7428	0.0734	8.0703	0.0402	8.1104	2.1403	0.0370	2.1772		7,414.1746	7,414.1746	0.1848	0.1835	7,473.4886
<b>Total</b>	<b>3.3033</b>	<b>13.7678</b>	<b>32.8891</b>	<b>0.1247</b>	<b>9.8765</b>	<b>0.2121</b>	<b>10.0886</b>	<b>2.6604</b>	<b>0.2015</b>	<b>2.8618</b>		<b>12,855.233</b>	<b>12,855.233</b>	<b>0.2424</b>	<b>0.9904</b>	<b>13,156.438</b>
												<b>1</b>	<b>1</b>			<b>5</b>



Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Building Construction - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6735	15.4377	17.3101	0.0288		0.7481	0.7481		0.7029	0.7029		2,738.1535	2,738.1535	0.6670		2,754.8288
<b>Total</b>	<b>1.6735</b>	<b>15.4377</b>	<b>17.3101</b>	<b>0.0288</b>		<b>0.7481</b>	<b>0.7481</b>		<b>0.7029</b>	<b>0.7029</b>		<b>2,738.1535</b>	<b>2,738.1535</b>	<b>0.6670</b>		<b>2,754.8288</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3179	9.2131	3.7935	0.0493	1.8062	0.0802	1.8865	0.5201	0.0768	0.5968		5,224.6423	5,224.6423	0.0533	0.7721	5,456.0438
Worker	2.6362	1.6289	26.4159	0.0710	8.0703	0.0377	8.1080	2.1403	0.0347	2.1750		7,174.8052	7,174.8052	0.1659	0.1694	7,229.4275
<b>Total</b>	<b>2.9540</b>	<b>10.8420</b>	<b>30.2094</b>	<b>0.1203</b>	<b>9.8765</b>	<b>0.1180</b>	<b>9.9945</b>	<b>2.6603</b>	<b>0.1115</b>	<b>2.7718</b>		<b>12,399.4475</b>	<b>12,399.4475</b>	<b>0.2192</b>	<b>0.9414</b>	<b>12,685.4712</b>

Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6735	15.4377	17.3101	0.0288		0.7481	0.7481		0.7029	0.7029	0.0000	2,738.1535	2,738.1535	0.6670		2,754.8288
<b>Total</b>	<b>1.6735</b>	<b>15.4377</b>	<b>17.3101</b>	<b>0.0288</b>		<b>0.7481</b>	<b>0.7481</b>		<b>0.7029</b>	<b>0.7029</b>	<b>0.0000</b>	<b>2,738.1535</b>	<b>2,738.1535</b>	<b>0.6670</b>		<b>2,754.8288</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3179	9.2131	3.7935	0.0493	1.8062	0.0802	1.8865	0.5201	0.0768	0.5968		5,224.6423	5,224.6423	0.0533	0.7721	5,456.0438
Worker	2.6362	1.6289	26.4159	0.0710	8.0703	0.0377	8.1080	2.1403	0.0347	2.1750		7,174.8052	7,174.8052	0.1659	0.1694	7,229.4275
<b>Total</b>	<b>2.9540</b>	<b>10.8420</b>	<b>30.2094</b>	<b>0.1203</b>	<b>9.8765</b>	<b>0.1180</b>	<b>9.9945</b>	<b>2.6603</b>	<b>0.1115</b>	<b>2.7718</b>		<b>12,399.4475</b>	<b>12,399.4475</b>	<b>0.2192</b>	<b>0.9414</b>	<b>12,685.4712</b>

Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.4 Architectural Coating - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	22.7308					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944		375.2641	375.2641	0.0225		375.8253
<b>Total</b>	<b>22.9863</b>	<b>1.7373</b>	<b>2.4148</b>	<b>3.9600e-003</b>		<b>0.0944</b>	<b>0.0944</b>		<b>0.0944</b>	<b>0.0944</b>		<b>375.2641</b>	<b>375.2641</b>	<b>0.0225</b>		<b>375.8253</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.5258	0.3249	5.2686	0.0142	1.6096	7.5300e-003	1.6171	0.4269	6.9300e-003	0.4338		1,430.9861	1,430.9861	0.0331	0.0338	1,441.8803
<b>Total</b>	<b>0.5258</b>	<b>0.3249</b>	<b>5.2686</b>	<b>0.0142</b>	<b>1.6096</b>	<b>7.5300e-003</b>	<b>1.6171</b>	<b>0.4269</b>	<b>6.9300e-003</b>	<b>0.4338</b>		<b>1,430.9861</b>	<b>1,430.9861</b>	<b>0.0331</b>	<b>0.0338</b>	<b>1,441.8803</b>

Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	22.7308					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944	0.0000	375.2641	375.2641	0.0225		375.8253
<b>Total</b>	<b>22.9863</b>	<b>1.7373</b>	<b>2.4148</b>	<b>3.9600e-003</b>		<b>0.0944</b>	<b>0.0944</b>		<b>0.0944</b>	<b>0.0944</b>	<b>0.0000</b>	<b>375.2641</b>	<b>375.2641</b>	<b>0.0225</b>		<b>375.8253</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.5258	0.3249	5.2686	0.0142	1.6096	7.5300e-003	1.6171	0.4269	6.9300e-003	0.4338		1,430.9861	1,430.9861	0.0331	0.0338	1,441.8803
<b>Total</b>	<b>0.5258</b>	<b>0.3249</b>	<b>5.2686</b>	<b>0.0142</b>	<b>1.6096</b>	<b>7.5300e-003</b>	<b>1.6171</b>	<b>0.4269</b>	<b>6.9300e-003</b>	<b>0.4338</b>		<b>1,430.9861</b>	<b>1,430.9861</b>	<b>0.0331</b>	<b>0.0338</b>	<b>1,441.8803</b>

Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.5 Paving - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.3880					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.4208</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>		<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2500e-003	0.0653	0.0269	3.5000e-004	0.0128	5.7000e-004	0.0134	3.6900e-003	5.4000e-004	4.2300e-003		37.0542	37.0542	3.8000e-004	5.4800e-003	38.6954
Worker	0.0548	0.0338	0.5488	1.4700e-003	0.1677	7.8000e-004	0.1685	0.0445	7.2000e-004	0.0452		149.0611	149.0611	3.4500e-003	3.5200e-003	150.1959
<b>Total</b>	<b>0.0570</b>	<b>0.0992</b>	<b>0.5757</b>	<b>1.8200e-003</b>	<b>0.1805</b>	<b>1.3500e-003</b>	<b>0.1818</b>	<b>0.0482</b>	<b>1.2600e-003</b>	<b>0.0494</b>		<b>186.1153</b>	<b>186.1153</b>	<b>3.8300e-003</b>	<b>9.0000e-003</b>	<b>188.8912</b>

Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.3880					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.4208</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>	<b>0.0000</b>	<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2500e-003	0.0653	0.0269	3.5000e-004	0.0128	5.7000e-004	0.0134	3.6900e-003	5.4000e-004	4.2300e-003		37.0542	37.0542	3.8000e-004	5.4800e-003	38.6954
Worker	0.0548	0.0338	0.5488	1.4700e-003	0.1677	7.8000e-004	0.1685	0.0445	7.2000e-004	0.0452		149.0611	149.0611	3.4500e-003	3.5200e-003	150.1959
<b>Total</b>	<b>0.0570</b>	<b>0.0992</b>	<b>0.5757</b>	<b>1.8200e-003</b>	<b>0.1805</b>	<b>1.3500e-003</b>	<b>0.1818</b>	<b>0.0482</b>	<b>1.2600e-003</b>	<b>0.0494</b>		<b>186.1153</b>	<b>186.1153</b>	<b>3.8300e-003</b>	<b>9.0000e-003</b>	<b>188.8912</b>

Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Duke Warehouse at Patterson Ave and Nance St VOC Mit.  
Riverside-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	769.67	1000sqft	17.44	769,668.00	0
Other Asphalt Surfaces	135.47	1000sqft	3.11	135,472.00	0
Other Non-Asphalt Surfaces	813.62	1000sqft	18.68	813,618.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2023
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	390.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use - Per Site Plan, includes paved and unpaved offsite improvements.

Construction Phase - Per Applicant

Off-road Equipment - 8 hours per day.

Off-road Equipment - 8 hours per day

Off-road Equipment - Per Applicant

Off-road Equipment -

Trips and VMT - Two (2) daily water truck trips added to grading and paving activities per Rule 403.

Grading -

Architectural Coating - VOC mitigation 10g/L.

Vehicle Trips - Per TIA.

Energy Use - Added 0.35 lighting energy intensity to account for parking lot lighting.

Water And Wastewater - Per WSA and RWUE

Sequestration - Per Landscape Plan

Construction Off-road Equipment Mitigation - 3 times per - Rule 403

Water Mitigation - Per RWUE

Waste Mitigation - Per CalRecycle

Fleet Mix - Per TIA.



Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstructionPhase	NumDays	55.00	43.00
tblConstructionPhase	NumDays	740.00	195.00
tblConstructionPhase	NumDays	75.00	43.00
tblConstructionPhase	NumDays	55.00	21.00
tblEnergyUse	LightingElect	0.00	0.35
tblEnergyUse	LightingElect	0.00	0.35
tblFleetMix	HHD	0.02	0.10
tblFleetMix	LDA	0.53	0.57
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.3100e-003	0.03
tblFleetMix	MCY	0.02	0.03
tblFleetMix	MDV	0.14	0.00

Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblFleetMix	MH	5.4680e-003	5.8000e-003
tblFleetMix	MHD	0.01	0.03
tblFleetMix	OBUS	6.1600e-004	6.5000e-004
tblFleetMix	SBUS	1.1000e-003	1.1700e-003
tblFleetMix	UBUS	3.1500e-004	3.3000e-004
tblLandUse	LandUseSquareFeet	769,670.00	769,668.00
tblLandUse	LandUseSquareFeet	135,470.00	135,472.00
tblLandUse	LandUseSquareFeet	813,620.00	813,618.00
tblLandUse	LotAcreage	17.67	17.44
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSequestration	NumberOfNewTrees	0.00	302.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblVehicleTrips	CNW_TL	6.90	40.00
tblVehicleTrips	CNW_TTP	41.00	15.70
tblVehicleTrips	CW_TTP	59.00	84.30
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.74	1.40
tblVehicleTrips	SU_TR	1.74	1.40
tblVehicleTrips	WD_TR	1.74	1.40
tblWater	IndoorWaterUseRate	177,986,187.50	3,620,205.00
tblWater	OutdoorWaterUseRate	0.00	3,150,979.00





Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Grading	14	35.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	722.00	282.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	144.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.1 Mitigation Measures Construction**

Water Exposed Area

**3.2 Grading - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					15.5666	0.0000	15.5666	4.3408	0.0000	4.3408			0.0000			0.0000
Off-Road	8.5403	92.5045	67.2963	0.1532		3.7296	3.7296		3.4313	3.4313		14,833.1740	14,833.1740	4.7974		14,953.1077
<b>Total</b>	<b>8.5403</b>	<b>92.5045</b>	<b>67.2963</b>	<b>0.1532</b>	<b>15.5666</b>	<b>3.7296</b>	<b>19.2962</b>	<b>4.3408</b>	<b>3.4313</b>	<b>7.7721</b>		<b>14,833.1740</b>	<b>14,833.1740</b>	<b>4.7974</b>		<b>14,953.1077</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1200e-003	0.0891	0.0305	3.6000e-004	0.0128	1.2200e-003	0.0140	3.6900e-003	1.1700e-003	4.8600e-003		38.6312	38.6312	4.0000e-004	5.7300e-003	40.3497
Worker	0.1288	0.0928	1.1292	3.2200e-003	0.3912	1.9500e-003	0.3932	0.1038	1.7900e-003	0.1055		325.5551	325.5551	8.9000e-003	9.1100e-003	328.4918
<b>Total</b>	<b>0.1319</b>	<b>0.1819</b>	<b>1.1598</b>	<b>3.5800e-003</b>	<b>0.4040</b>	<b>3.1700e-003</b>	<b>0.4072</b>	<b>0.1074</b>	<b>2.9600e-003</b>	<b>0.1104</b>		<b>364.1863</b>	<b>364.1863</b>	<b>9.3000e-003</b>	<b>0.0148</b>	<b>368.8415</b>

Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0710	0.0000	6.0710	1.6929	0.0000	1.6929			0.0000			0.0000
Off-Road	8.5403	92.5045	67.2963	0.1532		3.7296	3.7296		3.4313	3.4313	0.0000	14,833.1740	14,833.1740	4.7974		14,953.1077
<b>Total</b>	<b>8.5403</b>	<b>92.5045</b>	<b>67.2963</b>	<b>0.1532</b>	<b>6.0710</b>	<b>3.7296</b>	<b>9.8006</b>	<b>1.6929</b>	<b>3.4313</b>	<b>5.1242</b>	<b>0.0000</b>	<b>14,833.1740</b>	<b>14,833.1740</b>	<b>4.7974</b>		<b>14,953.1077</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1200e-003	0.0891	0.0305	3.6000e-004	0.0128	1.2200e-003	0.0140	3.6900e-003	1.1700e-003	4.8600e-003		38.6312	38.6312	4.0000e-004	5.7300e-003	40.3497
Worker	0.1288	0.0928	1.1292	3.2200e-003	0.3912	1.9500e-003	0.3932	0.1038	1.7900e-003	0.1055		325.5551	325.5551	8.9000e-003	9.1100e-003	328.4918
<b>Total</b>	<b>0.1319</b>	<b>0.1819</b>	<b>1.1598</b>	<b>3.5800e-003</b>	<b>0.4040</b>	<b>3.1700e-003</b>	<b>0.4072</b>	<b>0.1074</b>	<b>2.9600e-003</b>	<b>0.1104</b>		<b>364.1863</b>	<b>364.1863</b>	<b>9.3000e-003</b>	<b>0.0148</b>	<b>368.8415</b>

Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122		2,737.1520	2,737.1520	0.6711		2,753.9288
<b>Total</b>	<b>1.8146</b>	<b>16.7670</b>	<b>17.4392</b>	<b>0.0288</b>		<b>0.8645</b>	<b>0.8645</b>		<b>0.8122</b>	<b>0.8122</b>		<b>2,737.1520</b>	<b>2,737.1520</b>	<b>0.6711</b>		<b>2,753.9288</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4392	12.5629	4.3056	0.0514	1.8063	0.1724	1.9786	0.5201	0.1649	0.6850		5,446.9926	5,446.9926	0.0567	0.8084	5,689.3130
Worker	2.6571	1.9132	23.2942	0.0664	8.0703	0.0402	8.1104	2.1403	0.0370	2.1772		6,715.7370	6,715.7370	0.1836	0.1879	6,776.3164
<b>Total</b>	<b>3.0963</b>	<b>14.4761</b>	<b>27.5998</b>	<b>0.1178</b>	<b>9.8765</b>	<b>0.2125</b>	<b>10.0890</b>	<b>2.6604</b>	<b>0.2019</b>	<b>2.8622</b>		<b>12,162.7296</b>	<b>12,162.7296</b>	<b>0.2403</b>	<b>0.9963</b>	<b>12,465.6294</b>



Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122	0.0000	2,737.1520	2,737.1520	0.6711		2,753.9288
<b>Total</b>	<b>1.8146</b>	<b>16.7670</b>	<b>17.4392</b>	<b>0.0288</b>		<b>0.8645</b>	<b>0.8645</b>		<b>0.8122</b>	<b>0.8122</b>	<b>0.0000</b>	<b>2,737.1520</b>	<b>2,737.1520</b>	<b>0.6711</b>		<b>2,753.9288</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4392	12.5629	4.3056	0.0514	1.8063	0.1724	1.9786	0.5201	0.1649	0.6850		5,446.9926	5,446.9926	0.0567	0.8084	5,689.3130
Worker	2.6571	1.9132	23.2942	0.0664	8.0703	0.0402	8.1104	2.1403	0.0370	2.1772		6,715.7370	6,715.7370	0.1836	0.1879	6,776.3164
<b>Total</b>	<b>3.0963</b>	<b>14.4761</b>	<b>27.5998</b>	<b>0.1178</b>	<b>9.8765</b>	<b>0.2125</b>	<b>10.0890</b>	<b>2.6604</b>	<b>0.2019</b>	<b>2.8622</b>		<b>12,162.7296</b>	<b>12,162.7296</b>	<b>0.2403</b>	<b>0.9963</b>	<b>12,465.6294</b>

Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Building Construction - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6735	15.4377	17.3101	0.0288		0.7481	0.7481		0.7029	0.7029		2,738.1535	2,738.1535	0.6670		2,754.8288
<b>Total</b>	<b>1.6735</b>	<b>15.4377</b>	<b>17.3101</b>	<b>0.0288</b>		<b>0.7481</b>	<b>0.7481</b>		<b>0.7029</b>	<b>0.7029</b>		<b>2,738.1535</b>	<b>2,738.1535</b>	<b>0.6670</b>		<b>2,754.8288</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2944	9.7707	3.9212	0.0494	1.8062	0.0805	1.8867	0.5201	0.0770	0.5971		5,237.6085	5,237.6085	0.0522	0.7746	5,469.7499
Worker	2.4709	1.6901	21.4502	0.0643	8.0703	0.0377	8.1080	2.1403	0.0347	2.1750		6,501.0573	6,501.0573	0.1653	0.1734	6,556.8493
<b>Total</b>	<b>2.7652</b>	<b>11.4608</b>	<b>25.3714</b>	<b>0.1137</b>	<b>9.8765</b>	<b>0.1183</b>	<b>9.9947</b>	<b>2.6603</b>	<b>0.1118</b>	<b>2.7721</b>		<b>11,738.6658</b>	<b>11,738.6658</b>	<b>0.2175</b>	<b>0.9480</b>	<b>12,026.5993</b>

Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6735	15.4377	17.3101	0.0288		0.7481	0.7481		0.7029	0.7029	0.0000	2,738.1535	2,738.1535	0.6670		2,754.8288
<b>Total</b>	<b>1.6735</b>	<b>15.4377</b>	<b>17.3101</b>	<b>0.0288</b>		<b>0.7481</b>	<b>0.7481</b>		<b>0.7029</b>	<b>0.7029</b>	<b>0.0000</b>	<b>2,738.1535</b>	<b>2,738.1535</b>	<b>0.6670</b>		<b>2,754.8288</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2944	9.7707	3.9212	0.0494	1.8062	0.0805	1.8867	0.5201	0.0770	0.5971		5,237.6085	5,237.6085	0.0522	0.7746	5,469.7499
Worker	2.4709	1.6901	21.4502	0.0643	8.0703	0.0377	8.1080	2.1403	0.0347	2.1750		6,501.0573	6,501.0573	0.1653	0.1734	6,556.8493
<b>Total</b>	<b>2.7652</b>	<b>11.4608</b>	<b>25.3714</b>	<b>0.1137</b>	<b>9.8765</b>	<b>0.1183</b>	<b>9.9947</b>	<b>2.6603</b>	<b>0.1118</b>	<b>2.7721</b>		<b>11,738.6658</b>	<b>11,738.6658</b>	<b>0.2175</b>	<b>0.9480</b>	<b>12,026.5993</b>

Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.4 Architectural Coating - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	22.7308					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944		375.2641	375.2641	0.0225		375.8253
<b>Total</b>	<b>22.9863</b>	<b>1.7373</b>	<b>2.4148</b>	<b>3.9600e-003</b>		<b>0.0944</b>	<b>0.0944</b>		<b>0.0944</b>	<b>0.0944</b>		<b>375.2641</b>	<b>375.2641</b>	<b>0.0225</b>		<b>375.8253</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.4928	0.3371	4.2782	0.0128	1.6096	7.5300e-003	1.6171	0.4269	6.9300e-003	0.4338		1,296.6098	1,296.6098	0.0330	0.0346	1,307.7373
<b>Total</b>	<b>0.4928</b>	<b>0.3371</b>	<b>4.2782</b>	<b>0.0128</b>	<b>1.6096</b>	<b>7.5300e-003</b>	<b>1.6171</b>	<b>0.4269</b>	<b>6.9300e-003</b>	<b>0.4338</b>		<b>1,296.6098</b>	<b>1,296.6098</b>	<b>0.0330</b>	<b>0.0346</b>	<b>1,307.7373</b>

Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	22.7308					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944	0.0000	375.2641	375.2641	0.0225		375.8253
<b>Total</b>	<b>22.9863</b>	<b>1.7373</b>	<b>2.4148</b>	<b>3.9600e-003</b>		<b>0.0944</b>	<b>0.0944</b>		<b>0.0944</b>	<b>0.0944</b>	<b>0.0000</b>	<b>375.2641</b>	<b>375.2641</b>	<b>0.0225</b>		<b>375.8253</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.4928	0.3371	4.2782	0.0128	1.6096	7.5300e-003	1.6171	0.4269	6.9300e-003	0.4338		1,296.6098	1,296.6098	0.0330	0.0346	1,307.7373
<b>Total</b>	<b>0.4928</b>	<b>0.3371</b>	<b>4.2782</b>	<b>0.0128</b>	<b>1.6096</b>	<b>7.5300e-003</b>	<b>1.6171</b>	<b>0.4269</b>	<b>6.9300e-003</b>	<b>0.4338</b>		<b>1,296.6098</b>	<b>1,296.6098</b>	<b>0.0330</b>	<b>0.0346</b>	<b>1,307.7373</b>

Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.5 Paving - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.3880					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.4208</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>		<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0900e-003	0.0693	0.0278	3.5000e-004	0.0128	5.7000e-004	0.0134	3.6900e-003	5.5000e-004	4.2300e-003		37.1462	37.1462	3.7000e-004	5.4900e-003	38.7926
Worker	0.0513	0.0351	0.4456	1.3400e-003	0.1677	7.8000e-004	0.1685	0.0445	7.2000e-004	0.0452		135.0635	135.0635	3.4300e-003	3.6000e-003	136.2226
<b>Total</b>	<b>0.0534</b>	<b>0.1044</b>	<b>0.4735</b>	<b>1.6900e-003</b>	<b>0.1805</b>	<b>1.3500e-003</b>	<b>0.1818</b>	<b>0.0482</b>	<b>1.2700e-003</b>	<b>0.0494</b>		<b>172.2097</b>	<b>172.2097</b>	<b>3.8000e-003</b>	<b>9.0900e-003</b>	<b>175.0152</b>

Duke Warehouse at Patterson Ave and Nance St VOC Mit. - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.3880					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.4208</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>	<b>0.0000</b>	<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0900e-003	0.0693	0.0278	3.5000e-004	0.0128	5.7000e-004	0.0134	3.6900e-003	5.5000e-004	4.2300e-003		37.1462	37.1462	3.7000e-004	5.4900e-003	38.7926
Worker	0.0513	0.0351	0.4456	1.3400e-003	0.1677	7.8000e-004	0.1685	0.0445	7.2000e-004	0.0452		135.0635	135.0635	3.4300e-003	3.6000e-003	136.2226
<b>Total</b>	<b>0.0534</b>	<b>0.1044</b>	<b>0.4735</b>	<b>1.6900e-003</b>	<b>0.1805</b>	<b>1.3500e-003</b>	<b>0.1818</b>	<b>0.0482</b>	<b>1.2700e-003</b>	<b>0.0494</b>		<b>172.2097</b>	<b>172.2097</b>	<b>3.8000e-003</b>	<b>9.0900e-003</b>	<b>175.0152</b>